THE LANCET.

LECTURES

ON THE

THEORY AND PRACTICE OF PHYSIC,

By DR. CLUTTERBUCK.

Theatre, General Dispensary, Aldersgate-street.

Lecture VII.

Gentlemen,

At my last Lecture, I was pointing out the general properties of disease, previous to considering them individually. Diseases, I remarked, are to be studied in several points of view, as,

1. In regard to their appearances, called symptoms; as it is by them that we are able to discover disease.

2. In respect to their *causes*, both *occasional* and *predisposing*.

3. In regard to their intrinsic nature, or *proximate* cause; and lastly,

4. As to treatment.

Without this division, we cannot have that comprehensive knowledge of the subject which is necessary to successful practice.

I mentioned, that diseases generally consist of more than one symptom, and frequently of a great many; and that they are often not to be known by any single symptom, but by an observance of the whole. Few diseases, for instance, can be known by pain, as it is a symptom of several, and those of different natures. We are obliged to inquire much further than this, before we can arrive at a safe conclusion as to the nature of the disease. Sometimes a disease is only to be known by a succession of symptoms, and requires to be watched in its progress, before we can determine its nature. For example, no person could detect an *intermitting fever* by seeing it in any one of its stages. It is only by watching it through several stages, that its nature can be ascertained. So, likewise, with regard to *eruptive fevers*. A person seeing a patient labouring under the eruptive fever of *small pox*, could not distinguish the disease until the eruption had taken place, and often not till the eruption has proceeded for several days. This shows us the necessity of paying close attention through the whole course of a disease, the symptoms varying almost daily. Some symptoms give rise to others; and frequently there is a series of symptoms produced, one only arising out of the original cause, and the rest depending in succession upon each other; for instance, in inflammation of the lungs, we see a series of symptoms depending upon each other. At the outset, and in the slightest affections of this sort, the symptoms are very few. There is, perhaps, some uneasiness in the chest, occasionally amounting to pain. There is slight disorder of the respiratory function, such as coughing, and a little difficulty of breathing. These are the first symptoms, and, in many cases, there are no others. If, however, the disease proceeds, and acquires an aggravated form, a variety of other symptoms soon make their appearance, some local, some general. If the inflammation be extensive, its ordinary effect, swelling, takes place, the consequence of which is obvious; the air cells become pressed upon, and this produces oppressed breathing and wheezing. Another consequence is, that the blood does not undergo its proper change, and a livid hue of the skin is produced. This is particularly observable in those parts where the vessels run superficially. A deficiency of animal heat is the next consequence, for if the blood be not sufficiently changed in the lungs, there will be deficiency of animal heat, which is in a great degree dependant upon respiration. Another effect arising from the swelling of the lungs, is, that the blood vessels suffer a degree of compression, and hence the blood cannot pass with freedom through the lungs, so as to reach the left side of the heart. The consequence of this is, a small, feeble, and often irregular pulse. In severe cases, life may be destroyed from this cause. Thus we see, that if the various symptoms be analysed, they will be often found depend-

ing upon one or two. In practice, it is of great advantage to discriminate between primary and secondary symptoms; the latter should be comparatively disregarded, and our chief attention turned towards the former. The neglect of proceeding in this way is often a source of practical evil. Where, for instance, the general circulation is weak, as indicated by feebleness of pulse, attended with a feeling of weakness, practitioners have been often led to the use of stimulants, without considering the nature of the cause producing those symptoms. Stimulants naturally enough suggest themselves as proper remedies, where the pulse is observed to be feeble. But if this state is induced by actual inflammation, as in the case alluded to, it is obvious that the effect of such remedies can only be to increase the mischief. Again, on various occasions in fever, the pulse at the wrist is weak, and there is the greatest prostration of muscular strength, yet in most of these cases stimulants are highly injurious, while bloodletting is no less serviceable; the reason is, that the weakness of pulse, as well as the muscular debility, is the effect of an oppressed state of the brain, proceeding from a violent inflammatory action taking place in this organ. Practitioners who study appearances only, are very apt to fall into this error. More need not be said to show the importance of discriminating between primary and secondary symptoms.

The *essential* characters of diseases must be distinguished from such as are occasional or accidental only. Diarrhœa is thus often an attendant upon fevers, but it is not essential to them. Such accidental symptoms throw no light upon the nature of the disease, and if we allow them to enter into our speculations upon the point, we are almost sure to come to a wrong conclusion.

When a disease is presented to us, two objects should engage our attention; the first is, the discovery of its *seat*, and in the next place, we should inquire into its *nature*. Commonly, it is not difficult to discover the seat, unless the disease by long continuance has become complicated. At the outset no such difficulty is experienced. By attention to the feelings alone of the patient, and often by mere inspection, we can acquire this knowledge.

It is not so easy to ascertain the nature of a disease, and in some cases it cannot be accomplished. A great deal of obscurity exists in regard to the intrinsic nature of disease, which will probably never be wholly removed. It is necessary to observe, that we consider disease as an affection of the solid parts of the body. It does not consist in a vitiated quality of the blood, or in any noxious matter mixed with that fluid. It consists, as I have before said, in "the imperfect and irregular action of the parts affected." This disordered action is in many cases attended with an alteration of structure; but this is to be considered as a remote effect. I may illustrate this, by reference to inflammation, which is a state of disordered action, frequently, indeed, producing alteration of structure. But this alteration of structure is not essential to inflammation; it is a consequence of it, and that only where it has continued for a certain time. Hence it is that dissection will not always discover the disease. For if death takes place, before alteration of structure can be effected, it is evident that no change will be observed after death; dissection, therefore, is of limited use in discovering either the seat or nature of disease. It is only in those cases where the disordered action has continued so long as to alter the structure of the part, that visible traces will be discovered after death. The most violent diseases may thus leave the part without any post-mortem appearances. Some have denied the existence of inflammation in certain cases, because no redness has been discovered upon dissection. We have, however, no right so to conclude, for there may have been the most satisfactory proofs during life, that such a disease was going on. We can, in fact, trust better to symptoms, for these, if minutely scrutinized, will rarely deceive us.

It is important to remark that *pain* is generally a sign not to be relied upon, as indicating the nature of a disease. It may arise from different causes,—from different states of disease, requiring a totally different treatment. It is a symptom, and not a disease.

Diseases may exist *singly*, or be *complicated* with others. In general, diseases take place singly. There seems to be an indisposition in the body to fall into disease of various parts at the same time; and hence we more frequently meet with *simple*, than compound diseases. There are no such things as *universal* diseases, except such as become so in a secondary way, by sympathy with the part first affected.

Most diseases consist in disordered *vascular* action. It is a most important fact, that all the great and dangerous

diseases which occur in practice are, with very few exceptions, states of disordered vascular action; and we are in consequence, or ought to be, employed chiefly in regulating vascular action. When we come to speak of inflammation, it will be seen, that 99 cases out of 100, are actual states of inflammation, or its immediate consequences; commonly, however, they are merely different degrees or stages of inflammation. It is true, that the names of diseases will not always lead us to this conclusion; for instance, the terms dysentery, diarrhœa, catarrh, and rheumatism, have no reference to inflammation, and yet these diseases are all of them inflammations, differing only as to the seat they occupy. Now as inflammation is chiefly a state of disordered vascular action, and as this disease constitutes so large a portion of all that occur, it is evident, that the vascular system is the seat of the greater number of diseases.

One disease has a tendency to take off another. This arises out of the circumstance before mentioned; namely, the indisposition there is in the system to fall into different states of disease, at the same time; so that when one disease arises in the system, it is less liable to fall into another; and if a second should arise, the effect of it will probably be, to relieve, if not remove, the former; the one proving thus a remedy for the other. This may be remarked as a general rule; there are, however, many exceptions to it. The explanation of this fact is to be sought for in the general laws of the animal economy. There appears to be a certain quantity of vital power present in the system, and which is employed and expended in the performance of the various functions; hence, only a certain quantity of action can be made to take place in the system, in a given time, consistently with health, or even life. If more than this be produced, exhaustion will be the inevitable consequence; and thus it is, that general stimulants exhaust the vital power. Now if any part of the body be in a state of active disease, a disproportionate quantity of the vital power will be expended on the diseased part, and general weakness be induced. We find that whenever any excessive exertion is made, even in health, it tends to produce weakness of the whole system. Thus over-exertion of the voluntary muscles will have this effect: mental exertion does the same thing; for we find that those who employ their mental powers too intensely fall into a state of bodily weakness; the vital power is too rapidly expended. The same takes place in diseases. If there be excessive action going on in any part of the system, all the functions will be ill performed. Thus in cases of diarrhœa, where the intestinal canal is in a state of over-exertion, general weakness is produced, and the same thing occurs in all active diseases. This appears to be the reason why, when disease is excited in any one part, it is less likely to take place in another. The fact, however, is so, whether the explanation be satisfactory or not. It is in this manner that chronic affections, (as an old ulcer, or cutaneous disorder,) although troublesome in themselves, are a sort of safeguard to the body against any other disease. In practice, we take advantage of this fact; knowing that one disease influences another, in one case mitigating it, in another removing it, we institute artificial diseases, in the hope of taking off such as arise naturally. Thus we excite artificial diarrhœa, by purgatives; because experience sufficiently proves, that many diseases may be removed by so doing. If we give emetics, it is not in general for the purpose of discharging any thing noxious out of the system, but to produce an artificial disease—vomiting, in order to influence the diseased action that was previously going on. Emetics thus often succeed in curing ophthalmia, not by discharging from the stomach any noxious matters which produced the disease, but upon the principle I have just mentioned, and which is called the principle of *counter-irritation*. A blister can be considered as acting only in the same way. It is a powerful means of influencing diseases, and one of the best means we have of taking them off.

Diseases terminate variously. A large proportion terminate in health, without the aid of medicine. We are not to suppose, that wherever disease exists, medicine is called for. A great proportion of mankind have not the benefit of the medical art, and yet diseases in such do not invariably prove fatal. Disease has often a tendency to subside of itself; and this tendency is so strong, that in many cases it may be safely relied upon, there being no occasion for active treatment. If a disease has a natural tendency to cease of itself, it is often much better to let it run its course, than to attempt to interrupt its progress, for the purpose of cutting it short. In slight catarrhal affections, and in diarrhœa, we may have it in our power to put a speedy stop to the disease; but the remedies used for the purpose, such as opiates and astringents, are often worse

than the disease itself. In all cases, we should weigh the effects of the treatment with the effects of the disease; otherwise the medical art would be be an injury, rather than a benefit to mankind. To determine the cases in which it is proper to attempt the immediate removal of a disease, or, on the other hand, to allow it to run its course, requires a minute acquaintance with all the circumstances.

Diseases sometimes terminate spontaneously, without any perceptible change. At other times, they go off by some intermediate or perceptible change, such as increased secretion. If any part of the mucous membrane be inflamed, the natural termination is by increased secretion; as is seen in diarrhœa, and catarrh. These are cases, that seldom call for the aid of artificial means; for the increased secretion that takes place proves a natural cure to the disease.

Another way in which disease may terminate is by disorganization, or change of structure. Inflammation has always this tendency. Now as disorganized parts cannot perform healthy functions, it is of consequence to put a stop to diseases which have this tendency, particularly if the function be essential to life; as for instance, respiration. If inflammation of the lungs take place, it is of essential importance that it should be put a stop to as speedily as possible.

Diseases in many instances terminate fatally, often in spite of the most judicious treatment. We are not to imagine that we have a perfect control over diseases. There is hardly one disease which we can with certainty cure. Every now and then, cases occur which disappoint our best hopes; where we have had reason to believe the disease was under our command, it has nevertheless proved fatal. This should render us cautious on all occasions in giving a prognosis.

Diseases may terminate fatally in a variety of ways: sometimes it is from the importance of the organ to life. There are some functions which cannot be interrupted without destruction of life; as those of the brain, heart, and lungs. If the disease be of that magnitude, as to materially disturb the functions of either of these organs, it may prove fatal from that cause. Diseases, however, oftentimes prove fatal, when seated in parts of no immediate importance to life, as the skin. Extensive burns thus frequently prove fatal. In these cases, we attribute the fatal event to the general disturbance of the system, or irritation. A certain quantity of disease, situated in any part of the system, may kill, by producing such a disturbance of the general system as is incompatible with life. This is all the explanation we can give. We are far from knowing the exact way in which the effect is produced.

ERRATA in Dr. CLUTTERBUCK's *last Lecture.*

Page 370, column 2, line 25, for "decayed" read *diseased.* Page 373, column 1, line 28, for "exposes" read *disposes.*

LECTURES

ON SOME

PRACTICAL POINTS OF SURGERY,

DELIVERED TO THE

Students of the late Borough Dispensary

BY MR. ALCOCK.

LECTURE VI.

Gentlemen,

IT has been suggested to me, by one whose experience and knowledge of his profession entitle his opinions to respectful deference, that it might be useful to the junior student, to point out, more particularly, the mode of restraining hæmorrhage from leech-bites, much difficulty having been occasionally met with, and unsuccessful attempts not unfrequent, whilst the opinions of professional men are by no means unanimous, or conclusive, as to the best means to be employed on such occasions. Having alluded to the excellent work of the late Mr. Haden, whose premature decease is a loss to medical science, I should not deem it necessary to revert to this point of practice were it not that in Mr. Haden's publication, in addition to clear and definite directions for the restraining of hæmorrhage by pressure, other methods are pointed out which I conceive to be unnecessary and objectionable; I allude to the application of caustic, and to the passing a needle through the bleeding orifice and wrapping thread round it, as is done round the pin which is used to secure the vein when horses are bled. Should I ever meet with a case in which I could not command the hæmorrhage by more simple means, I should not object to adopt this method, and I am aware that it has

been actually practised on the human body and claimed as a notable discovery; but, until I meet with such an instance, I shall content myself with the simple plan which I have uniformly found to answer the purpose, namely, regulated pressure upon the orifices. So confident have I been that this must succeed, whenever the necessary knowledge of the principle and mechanical skill in the application of compresses and bandages had been obtained, that I have trusted, without disappointment, to the youngest of my pupils whose instruction had been carried beyond the point allotted for the consideration of the means of restraining hæmorrhage in the various accidents of common occurrence.

The mode I have adopted has been to form a number of extremely small compresses, equal to those of the bleeding orifices, and placing each upon its corresponding orifice, make sufficient pressure, with the tips of the fingers, upon them to prevent the further pouring out of blood, till time should be afforded for coagulation of the blood within the orifice to take place; then, gently removing the fingers, supply their place by other compresses, larger than those next the surface, and subsequently retaining them in their situation by a bandage adapted to the size and situation of the parts on which it was designed the pressure should be exerted.

Arteriotomy. In this operation the abstraction of blood is from an artery, instead of the more common method, in daily use, of taking it from a vein. Arteriotomy may be made to answer the purpose of either *local* or *general* bloodletting; the temporal artery is that generally preferred. Perhaps there is no other mode in which relief may be so speedily afforded, in certain cases, as by arteriotomy, and I need not again urge the duty of the medical attendant to promote the recovery of his patient by the most efficient remedies, and by the avoidance of excesses in the use of those remedies which sometimes leave the patient in a condition little less deplorable than when labouring under the disease for the relief of which the treatment had been employed.

I have known, in a case of delirium arising from inflammation of the membranes of the brain, that the abstraction of twenty-four ounces of blood from the arm has produced but a very slight and temporary mitigation of symptoms, whilst half that quantity, freely abstracted from the trunk of the temporal artery, afforded immediate and complete relief.

The *situation* to be preferred in the performance of arteriotomy must depend upon the intention which the operation is designed to fulfil; if a small local bloodletting be designed, the anterior branch of the temporal artery will generally suffice; if, on the other hand, the full effect of general bleeding be required, then it will be necessary to open the trunk of the artery.

The *requisites* are, as in bleeding from the arm, an accurate anatomical knowledge of the situation of the parts on which the operation is to be performed, a good light, and steadiness, as well on the part of the patient as on that of the operator. There should be at hand—hot water, clean soft sponges, towels, lancet or scalpel, ligatures, (if the trunk of the artery be the part selected,) scissors, adhesive or court plaster; some use compress and bandage, but from the distress I have witnessed attending the tight binding of the head for several days, I do not use it, neither could I submit to its inconveniences were I the patient. It may be necessary to remove the hair covering the part before beginning the operation.

In *opening the anterior branch* sometimes the use of the lancet, as in venesection, will suffice, but not very certainly; the scalpel is occasionally used instead, but in either case, unless the vessel be fairly exposed, there is often great difficulty in obtaining any considerable quantity of blood—the opening may become valvular; arterial blood more speedily coagulates than that poured out from a vein, thus filling up the wound; or the artery may be divided across and retract. The mode which for many years past I have preferred has been, to see the vessel clearly before I have opened it, and I do not recollect a single instance in which I have failed. My senior pupils have also, by attending to this precaution, succeeded with certainty, whenever the condition of the patient has not required that strict, or intense, attention which will not permit of delegation in the more urgent and dangerous instances of disease.

The *trunk of the artery* is to be found with great certainty, as it rises befor the ear and passes over the zigoma; higher up its course is somewhat irregular, but may be traced by the pulsation. (Models and drawings, showing the relation of the artery to the surrounding parts, were exhibited.)

There are various modes of performing this operation; they who are desirous of further information respecting the methods which others have adopted, may consult Mr. Benjamin Bell's System of Surgery, vol. iii.; Dr. Battey's work on

Arteriotomy; and Mr. Burn's Surgical Anatomy of the Head and Neck.

In taking blood from the trunk of the temporal artery, the hair covering the part having been previously removed if necessary, I make an incision, about an inch in length over the artery; when the integuments are divided there is a fascia underneath, covering the artery, which must also be divided to expose the artery; the vein is generally seen before the artery, but I have found sometimes, even between the right and left in the same patient, considerable difference in the relative position of the vein. This is a point on which you must be able to see your way clearly, that you may avoid error. (Mr. Alcock referring again to two of the drawings, the one from the right and the other from the left side of the same subject; the vein was anterior to the artery in the one and posterior to it in the other.) Hence you will infer, that I trust less to its position than to the difference in its texture to distinguish it from the artery; the artery itself, in this part, is so delicate that it may be almost mistaken for a vein. You will do well to bear in recollection the modifications which the blood vessels exhibit in various parts of the body; in the lower extremities the veins are firmer in texture than the arteries in the brain and some of the upper parts of the body. It is generally stated, "oh, you can always readily distinguish an artery in the living body by its pulsation;" this, however, is not always quite so simple in fact as in words; moreover, I dislike the poking of a finger into a wound to grope for the pulsation of an artery, which may be exposed to view and be distinguished without giving needless pain to the patient; if the surgeon cannot distinguish an artery from a vein when he sees it, in the name of humanity let him return to the dissecting room and learn, lest he imbrue his hands in the blood of his fellow creatures.

Another caution should be observed, not to wound the artery in seeking for it, for should this circumstance take place, the flow of blood will greatly impede the further steps of the operation.

The artery being clearly seen, a sufficient opening must be made on its anterior part; I do not consider it of much importance whether the orifice be longitudinal, oblique, or transverse; nor whether it be made with a lancet, a scalpel, or the scissors, provided it be made with sufficient precision, and do not wholly divide the artery. If the exposure of the artery be neatly made, it may be opened with as great facility in the living body as in the dead subject; but it must be done at once, for if it be opened by too small an orifice the flow of blood, though wholly inadequate to relieve the patient, will yet be sufficient to fill the wound as fast as it may be removed, and to obscure the parts so as to render precision in completing the operation out of the question.

The artery having been fairly opened, and a sufficient quantity of blood abstracted, the vessel should be secured by ligature, and I prefer using one below and another above the orifice to a single ligature; the reason for this preference will be stated in considering the causes of secondary hæmorrhage from this vessel.

The next steps are to clear and bring the edges of the wound into accurate contact, and to retain them by a strip of plaster, leaving one end of each ligature a little without the wound, the other ends having been removed near the knots. The usual attentions to remove any stains of blood, &c. should not be omitted.

I have been accustomed to place the ligatures around the artery before opening it; but so long as the end be effected, every one may use his own judgment in the choice and adaptation of subordinate means, which are more frequently regulated by convenience than by any strict reference to principle.

When arteriotomy has been judiciously directed, the relief of the patient thereby has been in a direct ratio to the sudden abstraction of the blood, for I have not been able to trace any greater benefit than from ordinary bleeding, when the blood, instead of flowing in a full stream, has merely trickled from the wound. I am inclined to believe that the opinions of some men, deservedly eminent for their general and professional attainments, relating to the comparative value of arteriotomy and venesection, may have been formed from having merely directed the operation to be performed, without superintending its performance, and thus informing themselves of details essential to the full remedial effects which may be thus afforded.

That it is easier to *prescribe* than to *perform* arteriotomy is not likely to be questioned, and that men of eminence in their profession may sometimes fail is not very wonderful, since the humbler details relating to the ordinary duties of the surgeon are seldom held of any value, unless the neglect or omission of them occasion accident or failure. I am led to make this remark, from the knowledge of the circumstance that a physician, who

highly appreciated the use of arteriotomy, was under the necessity of discontinuing to prescribe it on account of the frequent failures in attempting to carry his directions into effect. Another instance may, perhaps, serve to impress the importance of minor surgery, as it is sometimes called, more strongly upon your memory. It is not long since a gentleman, of considerable influence in the city, informed me, that a celebrated surgeon had, on a former occasion, ineffectually attempted to draw blood from his temporal artery, although the attempt was persevered in for a considerable time; the consequence was, that the patient lost all confidence, and not only consulted another surgeon, but proclaimed, among his numerous acquaintances, in no very gentle terms, the incompetence of him who had failed.

With the precautions before stated, I neither use compress nor bandage, the ligatures separate in a few days, and the incision unites by adhesion. Since I have adopted this method, I have had no further trouble than the mere performance of the operation, although the accidents which I have witnessed from arteriotomy have been so severe and dangerous, as to make me determine neither to direct nor perform this operation, unless the condition of the patient should render its performance essential to his welfare.

That men, ardent in the pursuit of any favourite remedy, sometimes unconsciously prefer dangerous and violent measures to those which are known to be safe and effectual, the history of our profession will abundantly testify. As an instance relating to arteriotomy, you may read Dr. Butter's relation of his attempt to take blood from the trunk of the *carotid* artery, which you will find at page 5 of his work. This work was published about forty years ago, and its author extolled the advantages of the practice far beyond what the profession has confirmed. He proposes a kind of bandage, the description of which, and the mode of its application, occupy seven pages. (Dr. Butter's engraving of his star bandage was shown.) No doubt the bandage which he describes will answer the purpose, as well as a tourniquet which I have seen, for compressing the vein in the simple operation of bleeding; but, gentlemen, I fear, in surgery, the more complicated the means the less likely they are to be the result of judgment matured by reflection and a thorough knowledge of the subject, for these generally lead to simple but efficient measures.

"A bandage, of whatever kind it may be, must either press sufficiently to compress the artery and obstruct the flow of blood, or it is useless. This force, if applied to the exact point, need not be very great, but the want of accuracy is generally compensated by a firmer degree of pressure over a larger surface. It is of more importance that you should have clear ideas of the principles by which your practice must be regulated than in the earlier part of education is generally supposed, for when the principle is clearly understood, the adaptation of the means to the end follows, if not as a matter of course, at least as one of induction. To apply this observation to our present subject, the diameter of the temporal artery is small enough to be effectually compressed by a surface of the extent of one square eighth of an inch, accurately bearing upon it; suppose the required pressure to be equivalent to the weight of one pound for any other quantity that may not be productive of inconvenience or injury, so long as this bears upon the proper place, its use will be as effectual as that of any greater weight, even if increased a hundred fold; but again, suppose, either intentionally or through want of consideration, the surface of the compress by which the pressure is made be increased to that of one square inch, (a much less size than often used either in compresses or pads for tourniquets,) what must be the pressure exerted to produce the same effect upon the artery as that of the smaller surface? The answer is obvious; the relative extent of surfaces being as one to sixty-four, the pressure upon the larger surface must be sixty-four times that of the smaller to produce the same effect upon the artery!

I have known great distress result from the application of a tight bandage to the head after arteriotomy, and I have also known it continued during nine days, a fortnight, and, when secondary hæmorrhage has supervened, to a much later period. Personally I suffer so much from any tight bandage around my head, even for a short time, that I can well conceive the distress patients must undergo when so circumstanced, I therefore prefer the ligature of the vessel, which is productive of no inconvenience, and the patient is not encumbered even with the semblance of a bandage.

Inflammation and suppuration of the surrounding parts may follow arteriotomy as readily as any other wound o the same part, and I have seen erysipelas, in more instances than one or two, succeed slight injury, and proceed to a

fatal termination. The wounds of the head inflicted during drunken frays, or broils, not unfrequently are succeeded by erysipelas.

Aneurism is sometimes the result of arteriotomy, but is not a frequent occurrence.

The ligature not coming away at the proper time is an occasional circumstance; it is owing to a branch of nerve, or a portion of fascia, being included in the knot, which ought to embrace the artery only.

Beware, gentlemen, that it is possible to carry the loss of blood from the temporal artery so far as to endanger the life of, or even to destroy, the patient. This had nearly happened, on one occasion, to a robust man who was under my care, by complying with his earnest entreaty to go on longer than I deemed prudent. He had been subject to attacks of illness, with great determination of blood to the head and delirium; he had previously been relieved from all his unpleasant symptoms by arteriotomy, and other antiphlogistic means. On the occasion to which I allude, although quite irrational when the artery was opened, he became perfectly sensible to all around him when about twelve or fourteen ounces of blood had flowed. I was desirous of stopping the blood when a little more had flowed, but his assurance of the great relief he experienced as the blood flowed, and his urgent entreaty that I would not stop it so soon, induced me to go beyond the limit which the apparent effects made me believe to be sufficient. He fainted, and for a considerable time appeared as if lifeless; when he recovered from his swoon, the re-action was violent in the extreme, and his hallooing (supposing himself following the hounds) made the apartment re-echo with his noise. This violent exertion continued about two hours, when he sank into a tranquil sleep, from which he awoke free from any urgent symptom, perfectly rational, but unconscious of all that had happened from the moment he had fainted till he awoke; his recovery was very speedy, and he remained long without any return of illness. From this case you may learn to hear and weigh whatever a patient may be pleased to suggest or to recommend to you relating to his treatment, but not to be seduced by his feelings or his wishes, but to follow your own judgment and act firmly, preferring his welfare to every other consideration.

Of all the accidents to which the performance of arteriotomy may give rise, that of *secondary hæmorrhage* is the most frequent, and perhaps the particulars of a few cases may be more clearly recollected than general observations.

In Dr. Botter's work, pages 49 and 53, you will find the details of instances of secondary hæmorrhage, from which the following are abstracts:—

"Case 1.—A young man, aged nineteen years, had his left temporal artery opened for an ophthalmia, October 19.

Oct. 24. The artery broke open last night, and he lost above eighteen ounces of blood from it, and about eight more this morning.

Oct. 30. He lost about ten ounces of blood by the artery last night; his headache is gone, and his eyes are a great deal better."

"Case 2.—A man, aged twenty-two years, had his left temporal artery opened Oct. 16th, from which he lost twenty ounces of blood.

Oct. 22. He went out yesterday, and the artery broke open of its own accord, and discharged, as was supposed, three or four pounds of blood before it was stopped. His head is no better; his pulse is a little quick, and not very low.

Oct. 26. The artery bled twice last night; his head is a good deal better.

Oct. 29. The head-ache is quite gone. The artery discharged eight ounces of blood yesterday.

In the course of the eight following days the artery burst open six different times, but the quantity of blood lost is not mentioned."

At an early period of my practice, a young woman received an accidental injury of the eye, which produced extravasation of blood into the anterior chamber; being called a few minutes after the accident, and having witnessed the unfortunate termination in blindness of similar accidents under ordinary treatment, I determined to take blood freely from the trunk of the temporal artery; this was effected without loss of time, and a sufficient quantity of blood abstracted to induce faintness, the bleeding ceased spontaneously, when she became faint. The artery was divided across, for at the time this case occurred, before any severe instance of secondary hæmorrhage had come under my observation, I trusted to the statements of authors that the full division of the artery, and the subsequent retraction of the ends of the vessel, would be a sufficient security against hæmorrhage. Before an hour had elapsed, I was hastily summoned to revisit the patient, who was losing blood from the temple so profusely as to alarm those about her, so that their attempts to stop it had proved quite

ineffectual. I secured the lower end of the artery by the tenaculum and ligature; but still the blood continued to flow almost as fast as before the ligature was applied; but on careful examination it was evident that the blood did not flow from the lower orifice, which I had tied, but from the upper portion of the divided artery, the inosculations having been sufficiently free to supply the upper part with blood so fully, as to produce a continuous stream. On securing this upper orifice, in the same manner as the lower, the flow of blood instantly ceased. The parts were cleaned, the edges brought together by a strip of plaster, and no further inconvenience was experienced. The blood effused into the anterior chamber was absorbed, and she regained perfect vision. This case induced me to reflect upon the causes of secondary hæmorrhage, and established in my mind the principle, that it was not consistent with the patient's safety to trust either to the division of the artery, nor to a ligature placed on the lower orifice only, which opposes the direct current of blood from the heart; but that to be perfectly secure, the upper orifice must also be tied to guard against the pouring out of blood in a retrograde direction, when the inosculating vessels should be so free, as in the preceding case, as to fully supply the upper part of the vessel above the orifice.

I may mention another case which came under my observation, by the occurrence of alarming secondary hæmorrhage. The patient, a man beyond the middle period of life, had had the trunk of the temporal artery opened during an epileptic fit, with immediate relief; a bandage had been applied to the head. At the distance of several days I was called from my bed to visit the patient, who was drenched in blood, pale and exhausted. In humble circumstances, the patient was not accustomed to burn a light in his room during the night, and the attention of his wife was called to him by hearing a sort of groan, and finding the bed wet between her and her husband. She got up, and was horror struck when she found her own linen and that of her husband, as well as the bed, steeped in blood, which had flowed from his temple. No very accurate estimate could be made of the quantity of blood thus lost, but it must have been very considerable. The further hæmorrhage was easily prevented by a graduated compress and bandage; but as its continuance became irksome, his attempts to shift the inconvenience probably disturbed the situation of the compress, and at intervals of a few days, hæmorrhage recurred, to no greater extent than might be expected, being immediately commanded by the pressure of the finger, till the bandage was re-adjusted. Under these circumstances, I determined to expose and secure the artery, which was effected, but not without some difficulty; for the condensation of the surrounding parts had deprived them of all that elasticity of the cellular membrane which affords facility in exposing an artery when the parts are in their natural condition, and the dividing of the condensed parts was like cutting through cartilage. The ligatures separated, and the wound healed without any untoward circumstance, there being no return of hæmorrhage after the vessel was tied.

Some years ago, a poor woman applied as an out-patient to an hospital, labouring under that effusion of lymph or matter into the anterior chamber of the eye, the result of intense inflammation, which authors designate by the term *hypopion*, and which so frequently terminates in blindness, by the bursting of the anterior part of the eye. Having mentioned several similar instances in which recovery had been effected by the use of arteriotomy, combined with other usual means, I was requested to open the artery. The patient was timid, and faintness occurred in the beginning of the operation; the artery was fairly opened, but, as might be expected under such circumstances, the blood did not flow immediately. Being called away, I placed a couple of small ligatures under the artery, to be in readiness to secure the vessel after sufficient blood should be drawn, and cautioned the gentleman for whom I had officiated in opening the artery, "Take care, Mr. ——, the artery is fairly opened; the poor woman is faint from apprehension; wait till she recovers from her faintness, and you may take as much blood as may be necessary; but don't forget to tie the vessel above and below the orifice." One of the surgeons coming into the room, ridiculed the idea of ligatures to the temporal artery! and directed them to be taken away. The poor woman was sent out about her business, but before an hour had elapsed, she was brought again to the hospital, almost lifeless from the loss of blood; so much was the poor creature reduced, that for some days it was doubtful whether she might recover; she did recover, and was fortunate enough to save the eye, to relieve which the opening of the artery had been performed.

In thus pointing out to you some of the occasions which have led me to take the

precautions I have recommended to you to prevent secondary hæmorrhage, I must in candour inform you, that my ideas on this subject are widely different from those of many of my professional brethren, whose rank and opportunities entitle their opinions to respectful consideration; and whilst I thus differ in professional opinion on what I consider an important point of practical surgery, I yet entertain feelings of regard and esteem for some of the individuals whose opinions and practice are opposite to my own.

I have never known any harm result to patients from carefully securing, by ligatures properly adapted to the size of the vessels, every arterial branch which from its size or situation might be likely to produce secondary hæmorrhage; but I have known much alarm and injury to patients by omitting these precautions, and I dare say there are few, who have seen much of surgical practice, who have not known of instances of secondary hæmorrhage proving fatal after surgical operations.

In an operation recently performed in one of the hospitals of this metropolis—the extirpation of a diseased female breast, the wound was dressed, and the patient put to bed without one single blood-vessel having been secured by ligature, although several arterial branches were divided, and the patient lost so much blood as to become faint before the operation was concluded. Secondary hæmorrhage took place in less than an hour after the operation, which alarmed the patient, and rendered the bandage and every thing in contact with her wet with blood. It was necessary to open again the wound, and before the hæmorrhage was fully restrained, eight vessels were secured by ligature.

I could adduce many instances of similar import were it needful. I do not mention the difference of opinion before alluded to, for the purpose of censuring the practice of others, but to explain the grounds on which my own opinions and practice have been formed, and to induce you to examine and reflect upon such cases as may fall under your observation, and thereby to be enabled to judge for yourselves.

(At the request of one of the Gentlemen present, the *mode of restraining hæmorrhage from the nose* was described and elucidated by cases, Mr. A. demonstrating the method of plugging the posterior nostrils upon one of the students, who kindly offered to allow it to be shown upon him.

The treatment of *hæmorrhage from the hæmorrhoidal veins; from the rupture of varicose veins* of the lower extremities was also considered.)

Hæmorrhage from the nose may arise from various causes, such as the simple rupture of a blood vessel, from erosion by ulceration, and not unfrequently from surgical violence in the removal of polypi from the nostrils. The first may, generally, be restrained by position, by diminishing the quantity of blood in the system by a speedy abstraction from a free orifice in a vein, and by the direct application of cold and styptic applications to the internal surface from which the blood is poured out. Should these means not succeed in restraining the hæmorrhage, the plugging of the posterior orifice of the nostril must be resorted to; and although it will seldom be required when the previous measures have been judiciously employed, yet it may happen that the patient may be so far exhausted before surgical assistance be obtained, as to render the immediate plugging of the nostril necessary to the patient's safety. An instance of this nature occurred in the person of a poor Irish labourer, who, when at work, was seized with vomiting of blood, and so sudden was the effect produced that his fellow workmen believed him about to expire on the spot. His countenance was pale and death-like, and he was unable to support himself, having become faint by the loss of blood, the quantity of which was extremely large, and, as had been stated, had been ejected from the stomach; but, on investigating the case, I found the blood had flowed from the nostrils before he became sick, and that the position had subsequently been such as to allow it to fall into the throat, from whence it had passed into the stomach; this was verified by the continuance of the hæmorrhage from the back part of the nostrils, though, from his enfeebled state, it was not so rapid as at first. In this case no time was to be lost, and the plugging of the posterior aperture of the nostril was speedily effected, and the hæmorrhage immediately ceased.

I may be allowed to digress to recommend you to accustom yourselves to make, beforehand, your arrangements for the treatment of sudden and dangerous accidents, that when they occur you may readily find the necessary apparatus; for delay, in the proper use of means, often amounts to the loss of life of the unfortunate patient.

There are few instances of disease in which the patient may not derive advan-

tage from the medical attendant investigating the circumstances under which the disease has occurred, so as to enable him to take a comprehensive view of the causes, and thereby adapt the treatment to the exigencies of the case. A gentleman was suddenly seized with hæmorrhage from the nose, and the quantity poured out was sufficient to excite alarm; although considerably diminished by the usual means, the flow of blood was not quite stopped, it recurred, in a greater degree, at short intervals, and I feared I should have been under the necessity either of plugging the nostril or of carrying depletory means to an extent to which I have great objection, as it is too apt to injure the patient, or at least to leave him in a state of extreme debility for a long time; both these methods were avoided, by having ascertained that this gentleman laboured under hypertrophy of the heart, and, consequently, that to take off the impulse of the blood from the vessel ruptured in the nostril, it was necessary to moderate the excessive action of the heart, which had not been effected by the loss of blood he had sustained. This end was obtained, in a few hours, by the use of colchicum and digitalis, the successive doses being regulated by the influence which these remedies exerted over the heart's action. In this case, not only was the recurrence of bleeding from the nose prevented, but the disease of the heart, which had been the cause, was so far relieved by regulated diet and a mild use of the remedies before mentioned, that for many months afterwards he enjoyed a degree of health to which he had long been a stranger.

In the employment of powerful remedies, I would strongly impress upon your minds the necessity of watching the effects produced, and regulating the doses accordingly. In an under-dose, the best medicament is inefficient, and I need not tell you, that an over-dose may destroy the patient. Constitutions and idiosyncrasies are so various, that what in one patient should be a proper dose, would be almost without effect on another, and yet capable of producing injurious effects upon a third.

The treatment of hæmorrhage from the nose, when it depends upon erosion by ulceration, although it may occasionally require the aid of the plug to restrain immediate loss of blood, must be regulated by more enlarged views, and that state of health which led to the ulceration and destruction of parts be corrected.

A gentleman in the country, who was supposed to labour under syphilis, for which he had taken quantities of mercury, sufficient to undermine the strongest constitution, after having suffered from ulceration within the nostrils and exfoliation of part of the spongy bones, became liable to frequent loss of blood from the diseased parts. A pint of blood was less than an average quantity thus lost, and the recurrence took place after irregular intervals of a few days; this repeated draining was more than, in his enfeebled state of health, he could sustain. It was suggested to the practitioner, under whose care the patient was, to plug the posterior aperture of the nostrils, which he determined to adopt, but delayed from time to time, owing to the bleeding having generally ceased by the patient becoming faint before he could arrive, (the patient living at some distance from the town in which the surgeon resided,) at length the sinking of the patient became so obvious, that the surgeon determined to use the plug the very next time the hæmorrhage should return; he was called, and went provided, but before he arrived the patient had expired.

In performing this operation, the object is rather to compress the artery which chiefly supplies the nostrils, (the spheno-palatine) than to prevent the blood escaping by closing the posterior orifice. An accurate knowledge of the form and extent of the posterior aperture of each nostril, and of the situation of the artery where it enters the upper and lateral part of the cavity, must be obtained by the study of the dissected subject, as a necessary ground-work; for if the plug, or compress, be too large, it will not enter so as to make pressure at the proper place, and if too small it will not be effectual. The size of the openings in the prepared skull may serve as an approximation to the proportion in the living body, but cannot be accurate, the soft parts having been removed. It is also necessary to ascertain, whether the flow of blood proceed from one or both nostrils, for if from one only, to that should the compress be used.

The means may be simple enough: a bougie curved, so that when passed along the nostril and carried onward, its point may be seen behind the soft palate; a thread, or ligature, slightly affixed or inserted into a nick made at the curved end of the bougie; a pair of dressing forceps; and a piece of fine soft elastic sponge, cut to the required size, to serve as the compress when introduced.

The operation consists in introducing the bougie with the ligature attached, through the lower part of the nostril, till the point appear behind and below

the soft palate; this will be facilitated by inclining the head backwards; then, taking hold of the anterior half of the ligature, separate it from the end of the bougie, bring it out at the mouth, and withdraw the bougie from the nostril; make a sliding loop on the fold of the ligature, into which introduce the sponge, carry it behind the soft palate with the forceps, then, removing the forceps, draw the ends of the ligature, which have remained at the anterior nostril, till the compress be fixed in its proper situation in the posterior aperture. The entrance of the sponge into the posterior aperture may be known by a slightly increased resistance; if properly adjusted, the cessation of the hæmorrhage is the immediate result. A small light compress may be placed at the anterior nostril, on which to tie the ends of the ligature, but it is rather with reference to the removal of the sponge, that it is convenient to keep the ends of the ligature sufficiently long, than from any necessity respecting the flow of blood from the nostril, for I have known this anterior compress removed soon after the operation without the slightest return of hæmorrhage.

The compress should not be allowed to remain beyond the third or fourth day, and should be removed by pressing it gently backwards by a bougie, till a part of it may be seen and laid hold of by the forceps introduced by the mouth; the present use of the attached ligature being to prevent the sponge falling down into the pharynx when detached from the nostril.

The principal occasional difficulty relating to this operation, results from the unsteadiness of the patient. When the patient is steady, a very few minutes will suffice to complete it.

Hæmorrhage from the hæmorrhoidal veins, unless when a consequence of surgical operation, seldom takes place, but as a symptom of some constitutional derangement, which requires attention in a greater degree than the mere local treatment. The latter consists in rest, the copious injection of cold or astringent liquids, such as the decoction of oak bark, &c. Should any case occur which did not yield to these means, the introduction of a portion of compressed sponge, by means of a pair of forceps, into the lower portion of the bowel, would act as a compress upon the vessels, the sponge by its elasticity adapting itself to the form and size of the parts, and by its previous compression expanding in a greater degree as moisture should be absorbed; but by attending carefully to the constitutional cause of the hæmorrhage, I have not found it necessary to use local compression.

Hæmorrhage from the bursting of a varicose vein in the lower extremity is often dangerous, and sometimes fatal, from the sudden loss of a large quantity of blood.* Patients who labour under a varicose state of the veins are extremely liable to ulceration of the legs, and the ulcers are less disposed to heal than under ordinary circumstances. The tying or dividing the varicose vessel has been recommended by some, and objected to by others, on account of the dangerous results which have followed it. In the early part of my practice I have performed the former operation, and without any ill effects; but as I have satisfied myself that by due attention to the general health of the patient, and by well adapted support of the limb, the comfort and safety of the patient may be secured, I do not think it right to perform an operation which has been known to prove fatal. The immediate treatment of hæmorrhage from a ruptured varicose vein, consists in applying a graduated compress upon the vein, immediately above and below the orifice, rather than upon the orifice itself, that the orifice may not be irritated by the compress; and securing the compress by a bandage accurately applied. This subject will come again under consideration when the application of bandages to the lower extremity shall be demonstrated; at present I may observe that the support should be sufficient to prevent the further loss of blood, but the bandage should not be so tight as to obstruct the circulation of the limb. Whenever a patient has suffered hæmorrhage from the bursting of a varicose vein, I deem it necessary to his or her safety (for this disease is more frequent in females who have borne many children and are employed in the laborous occupations of humble life, than in men) that the mode of restraining the flow of blood by uncovering the part and placing the tip of the finger immediately upon the orifice should be clearly understood, that the safety of the patient may not depend upon chance till surgical assistance can be procured.

* A fatal instance of this nature was detailed in the report of a coroner's inquest, in "The Times" of last week.—Ed. L.

REVIEW.

A Practical Treatise on Diabetes, with Observations on the Tabes Diuretica or Urinary Consumption, as it occurs in children; and on Urinary Fluxes in general. With an Appendix of Dissections and Cases. By ROBERT VENABLES, M. D., Physician to the Henley Dispensary. London, 1825. 8vo. pp. 214. Underwoods.

THERE is a species of marasmus not uncommon in children, which is complicated with a variety of symptoms, and among others with an inordinate secretion of urine, or of a fluid resembling it. This affection, though noticed by Morton, appears to have escaped the generality of writers since his time, and hence Dr. Venables comes forward to supply the omission. The following is his description of the disease:

"There is," says he, "a cause of emaciation among children, which has hitherto attracted but little of the attention of the profession. I have often observed children to all appearance very healthy up to a certain period, when suddenly the constitution changes, the child emaciates, its health declines, and, without any obvious derangement sufficient to account for the gradual deprivation of health, at last dies a most miserable object. In such cases, the head, chest, and abdomen, present no morbid appearances sufficient to account for the wasting and gradual decline of health. Accident led me to a discovery of the real seat of disease in such cases; and when the history of the complaint has been submitted to the reader, he will not be surprised that its nature and seat should have so long escaped general observation.

Several cases of wasting have presented themselves to me, in which I was unable to detect any serious or permanent derangement of function—vital or animal,—I was at a considerable loss to account for the phenomena, as well as to direct the treatment. Occasionally the bowels were out of order, but their healthy functions were readily restored, without however, any sensible effect upon the progress or severity of the disease. Sometimes dyspnœa attended, but evidently of a nervous nature; for the means which were applicable to the primary or secondary diseases of the head, speedily subdued this symptom, when those directly applicable to pulmonary affections proved, when not injurious, wholly useless.* The head often seems to be the seat of the disease, if we were to judge from the dull comatose state of the patient; but yet, upon dissection, the brain in many instances presented no diseased appearance whatever. In other cases, a partial but slight degree of vascularity has been observable, by no means, however, sufficient to account for the gradual, but commonly fatal, progress of the disease. From the tumid prominent abdomen, which generally, though not universally, prevails under these circumstances, we are naturally led to anticipate traces of disease in the alimentary tube, or some of the digestive organs. But dissection proves that our speculations are unfounded, for with the exception of flatus, which would of course account for the abdominal swelling, I have not been able to discover any other morbid appearances in these organs. When flatus has not been discovered, some slight thickening of the coats of the intestines may be observed, but in no way sufficient to account for the general symptoms.

Dr. V. admits that diseases of the head, chest, or abdomen, sometimes exist at the same time, but argues that they are consecutive rather than primary ailments, which, however, we think he has failed to establish.

"*Symptoms.*—The disease seldom if ever appears till after the child has been weaned. The reason of this, perhaps, is, that the exciting causes are seldom applied till after this period. A child which has continued healthy up to this time, will perhaps suddenly lose its usual flow of spirits, become dull and inactive, and although no obvious disease may be re-

* I have often seen a nervous dyspnœa mistaken for an idiopathic pulmonary disorder, and children subjected to the irritation of blisters, paregoric, &c. without the slightest benefit. A purge, in such cases, will frequently relieve: or a few leeches to the head, with a proper regulation of the alimentary functions, will effect more in subduing this distressing and frightful symptom, than ounces of paregoric, which is so frequently and so injuriously administered.

cognisable, yet the child will not appear in its usual health. It begins after a very little time to waste in flesh, and then gradually continues to emaciate. The skin becomes harsh, dry, and flabby, and seems to hang loosely about the body. The temperature is generally very much elevated, and, in the description of nurses, it will be said that 'they burn like a coal of fire.'

In the early stages of the disease, the bowels are regular, and little or no deviation from the natural and healthy appearance of the alvine discharges is remarkable. The tongue also at the beginning indicates no symptom of disease, but when it has continued for some time, and produced some degree of fever, then the tongue becomes covered with a coat of mucus. After a continuance, the bowels begin to act irregularly, the appearance of the evacuations deviating from that of health. Sometimes they are of a greenish hue, at other times they appear natural when passed, but become greenish some time after being voided. In adult cases, constipation very generally attends.

At a more advanced period, the abdomen seems preternaturally full and distended. The abdominal prominence frequently leads to the supposition of mesenteric disease, an opinion which is still farther confirmed by the progress of emaciation. I doubt much if the mercurial purges, which are exhibited under such circumstances, be wholly innocent. I have some reason to suspect that they have done considerable harm.

The pulse from the first is generally accelerated, and has a hard, wiry feel. Those who are much in the habit of examining the pulse in children, would recognise in the sensation which the pulse at this time gives, an indication of very great irritation in the vascular system.

The most remarkable symptom, however, although it frequently escapes observation, is the inordinate discharge of urine. This discharge increases in quantity so gradually, that it is not usually noticed. By the time it has become more remarkable, great thirst prevails, and hence it is neglected or unnoticed, because the parents and friends conceive an excessive discharge of urine, and an excessive consumption of fluid, as naturally associated. They entirely overlook the circumstance, that thirst and a very great consumption of fluid often prevail, and frequently with little or no discharge of urine. But it cannot be too forcibly impressed on the minds of the patient and friends, that the quantity of urine discharged in this complaint bears no regular proportion to the quantity of fluid or other aliment consumed.

With respect to the qualities of the urine, they will be found to vary in different cases. In some, the urine appears quite limpid; in others it appears milky, or like a mixture of chalk and water. Sometimes it is of a pale straw colour; and in a case which is at this moment under my care, I find it is of a green colour. The urine sometimes seems milky, dense, and its specific gravity is much increased. It frequently coagulates by heat, or by the addition of the different reagents. When the quantity of coagulable matter bears any thing like an equal ratio to the watery portion of the urine, and the discharge is much increased, the emaciation under such circumstances proceeds rapidly and extensively."

A few cases will serve to illustrate the author's opinions.

" A little boy, aged five years, had enjoyed but a very indifferent state of health for upwards of two years. He first became dull and listless, and quite averse to his usual playful exercises. He soon after began to emaciate, and the wasting at first proceeded very rapidly, but afterwards more slowly. He frequently complained of head-ache; his eyes were somewhat prominent, and the pupils rather dilated. The bowels were occasionally out of order, but at the commencement their functions were easily corrected. In the progress of the complaint, the abdomen became slightly enlarged, and then mesenteric disease was suspected. The appetite continued good till nearly the last. A cough frequently set in, and then the patient was considered phthisical.

Several practitioners were consulted upon this case, and various opinions, as to its nature, delivered. Those seemed to have been formed from the symptoms most prominent at the moment of seeking advice; thus, if the head was the part most remarkably engaged, the case was regarded either as actual or approaching hydrocephalus. When the abdomen was most affected, the disease was considered as a mesenteric affection; but when severe cough and dyspnœa were present, tubercles were presumed to exist in the lungs. Medicine, however, exerted no control over the progress of the disease. There was no distortion of the spine, nor any enlargement of the joints apparent.

This child ultimately came under my care, and I adopted, and subsequently abandoned, each of the above opinions, and this, too, several times in succession

No plan of treatment adopted (and a great variety had been recommended and pursued) seemed to exert any influence over the disease. The patient at last became generally anasarcous and died. When the dropsical symptoms set in, it was ascertained that the urine had been previously discharged in great quantity, at times exceeding eight pints in the day, but, on the appearance of dropsical symptoms, the discharge of urine greatly abated. The child died very soon after the appearance of the dropsical symptoms, and I examined the body.

On opening the abdomen, the bowels presented a natural appearance, except that they were somewhat distended with air. There was a little serous fluid in the cavity of the peritoneum, but in no great quantity. On opening the stomach, the mucous membrane seemed slightly turgid in several places, and similar appearances presented in different parts of the alimentary tube; but this vascular fulness was by no means sufficient to constitute disease. The liver was healthy in its structure, but wasted. There was nothing remarkable in the appearance of the pancreas or spleen. There were scarcely any appearances of disease in the mesentery; here and there a gland slightly enlarged. The abdominal viscera were now removed, and the kidneys examined. These organs were found in a very diseased state. The right kidney was greatly enlarged, and its vessels turgid with blood. The substance of the kidney felt soft and flabby to the touch. On cutting into it, dark-coloured fluid blood flowed out in abundance. A considerable quantity of a whitish, thin, glairy fluid was found in the pelvis and ureter. The left kidney presented nearly the same appearances, only, perhaps, not quite so much diseased as the right. The emulgent arteries were much enlarged.

The bladder was not diseased, but contained a quantity of a whitish fluid, similar to what was found in the pelvis of each kidney; but, when washed off the surface which it lined, the mucous membrane underneath appeared quite healthy.

In the chest a little watery fluid was found, but the structure of the contained viscera was perfectly healthy. The brain presented no appearances of disease."

Dropsy very commonly alternates with diabetes, which led Aretæus to observe, that latter was merely but a variety of the former, and to recommend the same methods of treatment. There can be no doubt that both are often symptoms of a broken constitution, or that they are often excited by similar causes.

Besides the above case the author has several others, one of which we shall quote:

"John Fossett, aged one year and seven months. Henley Dispensary, 6th April 1825. This child was brought to the dispensary in apparently a most hopeless state of disease. The child was emaciated, the brain seemed greatly oppressed, the bowels were full and hard to the touch, and constipated. Dark green-coloured evacuations were passed in small quantities and at long intervals. The child was thirsty, but not remarkably so. The eyes had a dull, heavy appearance, but did not seem preternaturally sensible to the light. The skin hot and dry; the pulse quick and frequent. There was a trifling dyspnœa, with slight cough, and an exudation of frothy mucus into the bronchia and trachea, which was sometimes expectorated in small quantity.—The child could neither hold up its head nor support its weight, and therefore it hung down upon the mother's shoulder. Six grains of calomel with three of ipecacuanha and a scruple of rhubarb was divided into eight equal powders, and one ordered to be given three times a day. These powders were repeated on the eighth, and the effects to be increased by an enema.

11th. The patient was again brought to the dispensary, and the mother informed me and Mr. Moran, who happened to be present, that the appearance of the alvine evacuations were improved, but that they were very scanty. The other secretions she stated to be healthy and natural. We therefore conceived that the brain was oppressed, through an overloaded state of the alimentary canal; consequently, three grains of calomel with one of antimonial powder and some sugar were ordered to be given immediately, and repeated according to circumstances; and an aperient saline mixture to be given in proper doses every four hours.

15th. Leeches were applied to each temple, in consequence of some slight degree of coma. The stools had again become greenish, therefore the mercurial and mixture were continued, and the warm bath directed.

20th. The mercurial seems to have increased the green colour of the stools, and, besides, seems to have produced considerable irritation. I therefore prescribed as follows:—℞ Solut. chlorin. ʒj.; aquæ distillatæ, ʒvj.; tinct. caryophyll. ʒj. M. st. coch. j. bis terve in die.

At this period I discovered, for the first time, that the urine was passed too abundantly—to the extent of five and six pints daily. It was of a greenish colour,* its specific gravity 1·033; wherefore I began the phosphate of iron in grain doses, combined with colombo and rhubarb, three times a day.

22d. The bowels more regular, and the evacuations less discoloured; the urinary discharge as before. Augeatur dosis phosph. ferri ad gr. ij. ter in die. Perstet usu chlorini.

25th. The secretions from the bowels being natural, the chlorine was discontinued; the quantity of the urine has also been reduced about one pint and a half. Cont. phosph. ferri.

May 2d. Urine reduced to about four pints; but the bowels are purged, and the stomach oppressed. Six grains of kino and two of opium were therefore added, and equally divided into twelve papers of the powders of phosphate of iron, &c., and a draught of the compound infusion of gentian, with a few drops of the tincture of cloves, given about an hour before each dose of the powders.

9th. Urine reduced to two pints: specific gravity high, 1·028, still acid. The child sits erect, and recovers its spirits and healthy appearance. Flatulence.—Augeatur dos. phosph. ferri ad gr. iij. ter in die. Some aromatic powder was ordered as a carminative, and the bitter draught continued.

13th. Urine has increased in quantity about one pint, three pints being discharged in the twenty-four hours. Slight expectoration of mucus, bowels regular, respiration free. The phosphate of iron increased to five grains three times a day. Otherwise as before.

20th. The symptoms nearly as at last. Three grains more of opium were added to the powders.

23d. The urine again diminishing and becoming more natural in its appearance. Perstet.

30th. Skin dry, hot, and harsh, with slight cough and dyspnœa; the diuretic symptoms as at last. ℞ Pulv. antimon. gr. vj.; pulv. doveri, ʒj. ft. pulv. x.; st. j. ter in die; cont. phosph. ferri, omitt autem opium; admov. emplast.; picis burgund. sterno.

June 3d. Stools unhealthy, and of a greenish or blackish-green colour.† ℞ Solut. chlorini, ʒij.; aquæ distill. ʒviij. M. st. ʒss. ter in die; aliter ut ante.

8th. The urine much reduced in quantity, but the bowels still out of order; I therefore determined to try a mercurial. ℞ Acet. hydrarg. gr. iij.; ipecacuanhæ, gr. vj.; rhei gr. xij. M. ft. pulv. no. viij. st. j. bis in die.; cont. phosph. ferri.

17th. Urine three half pints in twenty-four hours. Specific gravity 1·018, strongly acid; no excess of urea. Bowels much relaxed, but the appearance of the discharges much improved, and the child seems much more healthy and animated. Six grains of the compound powder of chalk with opium were ordered to be taken immediately. The mercurial continued.

24th. The child seems now tolerably well, the urine natural in quantity, the specific gravity about 1·015. The bowels regular. Omitt. med.

29th. Convalescent. Discharged.

The following case is from Mortou's Phthisiologia, and illustrates the disease quite as well as any thing that has been put forward by Dr. Venables.

"Mr. Wheeler, living in Princes-street, though he has now three girls living and well, lost all his sons in their first infancy (that is, as soon as they began to breed their teeth) with a consumption from a diabetes. As for the name of the distemper, that he was ignorant of; but when he observed that he lost all his sons in the same manner, and that they were extremely emaciated with a continual and unquenchable thirst, and a strange flooding of urine, he at length asked my advice for a fourth, who at that time was breeding of his teeth. And he began, just like the three former that were dead, to be very thirsty, and to make water at the same immoderate rate that they had done, whereby his flesh was become very lank, and a hectical heat began to arise. So being confirmed in my opinion by so demonstrative an argument as the sweetness of his urine, being like honey, I pronounced it a consumption from a diabetes, caused by the breeding of his teeth, which could not possibly admit of a perfect cure, till the child had bred all his teeth. Within the space of a month or two, the poor infant seemed to have an *Hippocratical* face, and to be reduced to that degree of consumption, as to be arrived at the last scene of his tragedy; for he laboured under a colliquation, as

* This urine was acid, and probably bilious, hence the green colour.

† The iron, of course, would have a certain effect in this way, but it was from an inspection of the appearance and consistence of the evacuations, that I considered this symptom as meriting attention.

well by a looseness, as a diabetes, though he had no cough, nor any other affection of his lungs. However, for the present symptoms, I ordered a milk diet to be strictly observed, and an astringent electuary, and gave orders that for his thirst he should drink nothing but milk mixed with *Islington* waters all the summer, by which means his thirst and the flux of his urine seemed to be somewhat abated, and his flesh to be recovered. But the distemper returning at uncertain intervals with a remarkable colliquation and expense of the humours, as well by stool as by the urinary parts, *that is*, as often as he had any new teeth, according to the prognostics which I at first made; at length I ordered him six, seven, or eight grains of *rhubarb* to be taken every morning, and a little *diascordium* at night when he went to sleep. To the constant use of these remedies I left the child, and he persisted in the use of them for two years, at least that was till all his teeth were cut, by which means he continually gathered strength and flesh, and grew better every day, though he was in some measure troubled with a thirst and too great a flux of urine, till the time he had got all his teeth. But now being four years old, he enjoys his perfect health, and is a lusty boy, as if he had never been troubled with any distemper."

Dr. Venables has related seven cases of this urinary flux in children, in all of which derangements of the primæ viæ were very prominent symptoms, and in none is there sufficient proof that the disease was the diabetes mellitus. That an increased and vitiated secretion of urine may be noticed in many diseases both of children and adults, we are well assured, but it is merely symptomatic of a derangement of function in some of the chylopoietic organs. Mead was not far from the truth when he said, that diabetes was a disease of the liver, and not of the kidneys, for in most cases the latter organs are affected secondarily, or perhaps more remotely. And is it not probable that a considerable change is induced in the whole mass of circulating fluids, before the kidneys can secrete the liquid which is characteristic of diabetes, and which differs as much from urine as from blood? That the kidneys can only secrete the fluid which has been called diabetic urine, from blood containing the elements which constitute it, is pretty obvious; for by restricting the patient to animal food, the quantity of saccharine matter may be lessened, which could not happen if any elective power or diseased action of the kidneys were alone instrumental in forming it. Indeed there can be no doubt that the secretions of the kidneys are at all times varied by the least change induced in the blood. It is no answer to say that dissections of diabetic patients have proved that the kidneys are generally altered in structure, for the same may be observed of almost any organ in the body. We look upon the diabetes mellitus, as a sort of cachexy, depending upon an impoverished state of the blood, and originating in an insufficient or depraved action of the assimilatory organs. We profess ourselves indisposed to enumerate the various seats which have been assigned to this disease, or the numerous theories to explain its phenomena, which have from time to time prevailed. Suffice it to say, that all the speculations on the subject, from the days of Aretæus, down to those of Dobson and Darwin, have been abandoned as untenable; and we are apt to believe, that the plans of treatment which have been devised, have in the greater proportion of cases proved unavailing; for although the principal symptoms may be arrested for a period, they almost invariably return, or the patient soon falls a victim to phthisis, apoplexy, or dropsy. Hence the successful cases which have been recorded are not entitled to much consideration, for we know that many which have been published as cured, have soon afterwards terminated fatally, of which those by Dr. Satterley in the Medical Observations (and we could enumerate others) may be cited as examples. The author has related the cases of several

adults, in which diabetic symptoms were present; we have only room for the following:—

"Jane Lane, aged 39, married, Henley Dispensary, May 4th, 1825.—Great languor and debility; feverish heat of skin; pulse hard, small, and frequent; respiration hurried, and oppressed with frequent sighing, and seemingly considerable nervous irritation; flatulence; bowels confined; tongue foul and furred; cephalea; thirst; appetite fastidious, but otherwise good; urine abundant, from ten pints to a gallon and a half being passed daily. The urine was deep-coloured, and had a strong urinous smell, rendered still more sensible by the action of nitric acid. It was neither saccharine nor serous; but urea speedily precipitated, upon the urine being treated with nitric acid in the manner to be hereafter described. The specific gravity 1·029.

Small doses of calomel, about a quarter of a grain, in combination with the pil. galb. comp. and pil. aloës c. myrrha, were directed to be taken three times a day; and she was ordered a bitter alkaline* infusion, to be taken in divided doses. A senna draught was also given, to be used according to circumstances.

11th. The acidity of the urine has been much reduced, but little or no reduction of the quantity has been effected. The feverish state of the system still continuing, a saline mixture was substituted for the bitter alkaline infusion. On the 13th, some pills, containing antimonial powder and opium, were directed, to assist in relaxing the skin.

The above plan, with very little deviation, was persevered in till the 30th of May. The urine was now reduced to about a gallon, and its specific gravity brought down to 1·026. There was still a considerable degree of febrile irritation, although the skin felt soft and more relaxed; and as the bowels were irregular, and the evacuations frequently discoloured, I thought it possible that the constitutional irritation might be reduced by exciting a healthy action of the liver; wherefore calomel, antimonial powder, and opium, were given in divided doses, three times in the day, with directions to suspend the use of the medicine whenever the slightest tenderness was felt in the gums. Unfortunately, however, the directions were misunderstood, and on the 8th of June she was in a state of salivation. The tongue was foul, and very much furred, with a good deal of fever in the system. The mercurial was now suspended, and aperients merely prescribed.*

Although the urine was not increased in quantity, yet flakes were separated by the application of heat. Its specific gravity very nearly as before. A mucous flaky deposit separates spontaneously from the urine, if allowed to stand.

On the 23d, the quantity of urine having increased to about ten pints, I determined, although the tongue continued dry and furred, to exhibit the phosphate of iron, which was now prescribed according to the following formula: ℞ Phosphatis ferri 3ss. pulv. doveri ℈j. rhei gr. xij. M. ft. pulv. no. x. æquales; st. j. ter in die.

27th. The urine reduced to a gallon, or eight pints. The powders were continued; but as they seemed to increase the irritation of the system—more particularly the nervous system—a scruple of the pil. saponis c. opio was formed into six pills, and one directed to be taken three times a day, the bowels being kept soluble by an aperient mixture.

July 1st. The urine has been reduced to very nearly half a gallon. Ordered to continue.

6th. Urine half a gallon and half a pint by admeasurement; specific gravity 1·0217. The phosphate of iron seemed to excite a little fever, and therefore the phosphate of zinc was prescribed, under the following formula:—℞ Phosphatis zinci gr. xij. Ipecacuanhæ gr. iij. Pulv. ant. gr. x. Ext. hyoscyami q. s. ut ft. pil. sex; st. j. alt. noctibus. Repet pil. sapon. cum opio, et st. infus: sennæ ad alvum promovendam.

15th. The urine reduced to something under a quart; but she complains of acid and bilious eructations. The specific gravity has been considerably reduced. That of the specimen brought to me for examination, I found to be 1·01798. She felt herself so completely relieved, that she had determined to apply this day for her discharge. In consequence however, of the sudden derangement of her stomach, she was ordered a little rhubarb with an absorbent powder, as follows:—℞ Pulv. rhei gr. x. Pulv. cretæ gr. xij. ft. pulv. x.; st j. ter in die.

The urine passed in the evening had

* The alkaline infusion was directed because the urine was strongly acid.

* On her first application, she conceived herself too weak to be bled; and experience having taught me that bleeding frequently not only increases, but even induces the salivating effects of mercury, I was now, therefore, unwilling to resort to it, though I thought it might prove otherwise beneficial.

the colour of blood-water, or the washings of meat. Its specific gravity was much higher than that of the morning, being 1·03043. It deposited a considerable portion of pink sediment, intermixed with some of the earthy salts. The urine effervesced with nitric and acetic acids, was strongly alkaline, reddening turmeric-paper, and discharging the red colour given to litmus-paper by the acetic acid.*

18th. The urine passed this morning was more clear and natural in its colour; but by the addition of a few drops of the tincture of rhubarb, it assumed very nearly the colour of that passed on Friday evening. It deposited little or no sediment; the specific gravity was reduced to 1·02075.† The woman seems better, but still complains of flatulence, and some eructations. She was merely ordered a bitter infusion with tincture of ginger, and to attend to the state of her bowels.

25th. The urine passed in its natural quantity, still alkaline; specific gravity 1·02071. The sabulous deposits have diminished in quantity. Bowels rather costive. She was directed a few aperient pills, to be taken occasionally; and twenty minims of muriatic acid were added to the bitter infusion.

I am obliged to conclude the history of this case thus abruptly, that the sheets may be put to press.

Remarks.—This case I think instructive. It is the only one in which I have tried the phosphate of zinc. This salt, even in very small doses, seems to have manifested considerable powers in reducing the quantity of the urine. The increased specific gravity noted on the reduction of the quantity of the urinary discharge, may be accounted for on the principle of the diminution of the watery portion. The sudden alkalescence of the urine I cannot readily account for; the absorbent powder used as an antacid was chalk, but the alkalinity of the urine arose from the presence of ammonia, not of lime. In this case there appears to me to exist a strong tendency to calculous disease; and, if the case be neglected, I have no doubt that either confirmed diabetes will supervene, or some calculous concretion form. I shall take an opportunity of stating in a note, as the sheet passes through the press, the future progress of this case."*

In all the cases the most prominent symptoms were derangements of the primæ viæ. In few only were the characteristics of true diabetes present, and these occurred in persons who had not reached the zenith of life. In many instances there were no perceptible traces of sugar in the urine, which in specific gravity was sometimes below the healthy standard. The author has several lengthened sections on the subject of treatment, but it will be seen from the cases which are here cited, that he relies principally upon purgatives, alterants, and the phosphates of iron and zinc. But we think he cedes too much to the latter when he gives them a specific action over the urinary secretion. To our minds they act as tonics, and in no other way than by strengthening the organs of digestion. If these can be brought into tolerable order, we have little to fear that the urinary symptoms will disappear, but unfortunately, in a great proportion of cases the desideratum has not been attained. The author's work contains a summary of the treatment recommended by most of the moderns who have written on diabetes; and his cases of the "urinary flux" in children certainly deserve the attention of the profession.

* The alkaline properties arose from the presence of ammonia, or, more probably, the subcarbonate, as the red colour of the turmeric was not permanent, but evanescent.

† This specimen was not alkaline; the specific gravity in each instance was taken after the deposition of the sediments, which subsided spontaneously. When the specific gravity is taken by the gravity-bottle, a portion should be filtered, and the gravity of the filtered compared with that of the unfiltered portion. Frequently a difference of from ·005—·015 will be detected, proving the mechanical suspension of a quantity of matter insoluble in the urine. A knowledge of these facts may prove of some importance.

* This patient has been gradually improving in health, but I have not seen her lately.

THE ANNUAL DINNER

GIVEN TO

J. BROOKES, Esq. by his PUPILS.

On Saturday last this annual festival was celebrated by the Pupils and Friends of Mr. Joshua Brookes, at Willis's Rooms, St. James's-street. There is never any lack of zeal on the part of Mr. Brookes's pupils to evince their respect and gratitude to a teacher, whose pre-eminent abilities have been recognised for the last quarter of a century, not only in his own country, but in every part of Europe where the science of anatomy is cultivated; but the meeting on Saturday last was more numerous, and the testimonies of regard and admiration paid to this distinguished individual more cordial and enthusiastic than we have witnessed on any former occasion. Upwards of two hundred gentlemen were present, a more numerous assemblage than is commonly seen at the annual festivals of any single Metropolitan Hospital, and of this number, we understand, not more than thirty were visitors, that is, gentlemen invited to the festival who had not been pupils of Mr. Brookes. To us it was extremely gratifying to see this numerous and highly respectable assemblage, and to mark the *manner*, and the *spirit*, in which its proceedings were conducted, not merely because we are glad to see Mr. Brookes and every man of talent prosper, but because we viewed in that *assemblage* the triumph of individual talent over corporate imbecility, and, in its *proceedings*, another indication of the approaching downfal of corporate corruption. Our readers will see, presently, that even at the festive board it was remembered—(where, or when, can it be forgotten?)—that the Court of Examiners at the College of Surgeons have done all they can to deprive the profession and the public of the services of a man who is acknowledged to be the first anatomical teacher in this country; they have not, indeed, dared to act up to the letter of their bye-law by rejecting his pupils altogether, but they have declared, with a fatuity which might provoke derision, if it were not for the sordid profligacy of their real motives, that the science of anatomy can only be taught under certain states of temperature, of course, therefore, only in certain latitudes; that in this country, when the thermometer stands at, or about summer heat, no Englishman can learn anatomy; and that, therefore, all certificates of attendance at lectures, delivered by Mr. Brookes during the summer, shall be rejected.

After the cloth had been removed, and the usual loyal and patriotic toasts drunk in the accustomed manner,—

Dr. Ley, who presided as Chairman, expressed the high satisfaction he felt at seeing so large a meeting. Among the gentlemen assembled on this occasion there were, no doubt, some from all parts of the United Kingdom—who acknowledged the tutelary sanctity of St. George, St. Andrew, and St. Patrick.—*A Jove principium* was a maxim observed by the Heathens in paying respect to what they erroneously considered the great first cause; he trusted that, on the present occasion, he might be allowed, without offence to any of the modern Saints, to propose *la madre di tutti i Santi*, or, the little first cause.

The toast was drunk with applause, and an appropriate air sung by the professional vocalists.

The Chairman said he now rose to propose a toast which would, he was persuaded, be received with delight and enthusiasm by all present, for it was the health of an individual who had discharged the duties of an anatomical teacher during a period of five and twenty years with distinguished ability;—an individual who by his great talents, by his indefatigable industry, and by his zealous exertions for the interests of his pupils had contributed more perhaps to the advancement of anatomical science than any other teacher in this country during the long period which he had devoted almost exclusively to its cultivation. He (Dr. Ley) lamented that he had not personally had the advantage of receiving the rudiments of his professional education in the school of this distinguished anatomist; but he could estimate the excellence of his instructions, by observing the fruits of them in many of his pupils, whom he (Dr. L.) also had the hon ur of instructing, and we were told by the highest authority "by their fruits ye shall judge them." But this individual had other claims, independently of his great merits as a teacher in anatomy, to the esteem and gratitude, not only of his pupils, but of the profession, and of the country at large. The Museum in Blenheim-street was an imperishable monument of his genius, and of his ardent devotion to the interests of science.—(Applause.) The collection in that Museum not only reflected the highest honour on the individual under whose auspices and by whose indefatigable exertions it had been formed—it was an honour to

the British nation, (loud applause) and when the hand of Time—long might the day be averted!—should deprive them of him, whose science and whose taste had raised this lasting memorial of his fame, of *him* it might be said, as of another illustrious architect of his own glory, "Lector! si monumentum quæras, circumspice." (Continued applause.) It was necessary in point of form, and *only* in point of form, to name the individual, for they all recognised him, even from his (Dr. Ley's) feeble description of his genius and his talents, (applause,) and he would no longer deprive them, therefore, of the gratification of drinking "the health of Mr. Joshua Brookes."

The toast was received in the most enthusiastic manner, and the bumper was crowned with several successive rounds of applause.

As soon as silence was restored,

Mr. BROOKES rose to return thanks. He assured the meeting, that he felt most sensibly these kind and cordial testimonies of their approbation. Six lustres had now elapsed, since he first met his pupils at the festive board; (Bravo) and he had again the satisfaction of seeing around him a most numerous assemblage of his pupils, all of whom he considered as his cordial friends. (Applause.) He attributed the celebrity of his school not so much to any talents which he himself possessed, as to the zeal and ability with which his exertions had been uniformly seconded by his pupils. The success with which his labours had been attended, was undoubtedly a source of great satisfaction to him; many individuals who had conferred lustre on the Profession, had received their anatomical education in Blenheim-street, and his theatre was daily honoured with the presence of men most distinguished for their scientific attainments. The present, however, was not the moment for enlarging on the importance of anatomical studies, and he should confine himself, therefore, to expressing the deep sense which he entertained of the honour which had been conferred upon him at this their splendid entertainment. To their eloquent Chairman, whose abilities in the branch of the profession to which he chiefly devoted himself were well known and appreciated, he felt peculiarly indebted for the manner in which he had proposed the toast, which they had just so cordially received. The foundation of the obstetric art was enjoyment; (a laugh;) and as enjoyment was the cause, so he trusted it might prove the consequence of his friend's professional occupations. He begged leave to propose "the health of their able and eloquent Chairman."

The toast was drunk with applause.

The CHAIRMAN, in returning thanks, said, that as his branch of the profession had been alluded to, he could not avoid taking that opportunity of observing, that he had always found the task of instruction extremely easy with regard to Mr. Brookes's pupils, and that they wanted no instruction at all in that small department of the art to which his friend had more particularly adverted. (Laughter and applause.)

The CHAIRMAN next gave "the College of Physicians;" and the toast was drunk with applause.

Dr. TEMPLE briefly returned thanks in the name of the College, and expressed his conviction that anatomy was the only solid foundation of medical science.

The CHAIRMAN then gave "the College of Surgeons." The toast was received with applause mingled with disapprobation.

Mr. GUTHRIE returned thanks. He regretted that the absence of Mr. Keate had imposed this duty upon him, and thus given him a momentary distinction, to which he had no other pretension than the circumstance of seniority. It might be an honourable distinction, but still it was rather a painful thing to reflect that he had no other claim to pre-eminence except that of age. Be that as it might, he was the senior surgeon present, and also a member of the Council, a body whose conduct had been uniformly influenced by a regard for their interests. (Strong disapprobation, and cries of "no, no.") At any rate they must admit that they devoted twice as much time as they had formerly done to the examination of candidates for admission. (Here a pupil exclaimed "so much the better.") He would not, however, pursue this topic, but content himself with returning thanks for the honour which had been conferred on the body to which he belonged.

The CHAIRMAN next proposed "the Worshipful Company of Apothecaries."

This toast fared still worse than the last, for it was received with hisses and laughter. In vain did the toast-master announce that the toast was to be drunk with "three times three;" the Chairman and the gentlemen at the cross-table rose to drink it with the accustomed honours, and the rest of the company rose apparently out of courtesy of Mr. Brookes, but not a single voice

was raised in behalf of the Worshipful Company.

In this dilemma, the Chairman, finding that there was no disposition on the part of the company to drink the health of the Worshipful Apothecaries, made a dexterous and obvious transition to the subject of *horses!* He might, he said, be a little out of order, but he was sure they would have have no objection to drink the Veterinary College, the object of which excellent institution was the better health of that useful animal the horse.

[All this time the company were standing up to drink the health of the Worshipful Apothecaries; but as the Chairman had now fairly entered upon a different subject, though not perhaps, *generically* different in a zoological sense —there was a cry of "seats, seats," and accordingly the company resumed their seats.]

The Chairman proceeded to advert to the great advances which had been made in veterinary surgery, under the auspices of the present able Professor at the Veterinary College. The knowledge of that gentleman was like Falstaff's wit, for it had been the cause of communicating most extensively to others a knowledge of the diseases of the horse, and an acquaintance with the principles, on which alone the treatment of those diseases could be successfully conducted. He concluded by proposing "The Veterinary College;" the toast was drunk with applause.

The healths of "the Stewards, and of the Managing Committee," were next drunk with the usual honours.

On the health of "the Visitors" being given,

M. Sigogne, a French gentleman, after apologising for venturing to address the meeting in a language with which he was but imperfectly acquainted, expressed the veneration he felt for the character and attainments of Mr. Brookes, whose pupil he had formerly been, and bore testimony to the celebrity which Mr. Brookes had acquired on the continent, as one of the first anatomists in Europe. (Applause.)

Many other appropriate toasts were given, and the conviviality of the evening was kept up to a late hour.

We must not forget to mention that Fitzwilliam distinguished himself among the professional vocalists, as he always does at medical dinners. A passage in one of his comic songs,

> Though subjects be so scarce,
> I'd *scarce* be one myself, sir,
> Tol de rol, de rol, &c.

was received, as usual, with unbounded applause. We recollect that, at a celebrated festival of St. Thomas's and Guy's, at which Mr. Travers and Mr. Green immortalized themselves,* the former by certain profundities touching medical education, and the latter by a speech about butterflies and paper-kites, this identical passage, sung by the same comic singer, produced a similar effect. Mr. Green, in particular, who is the *arbiter elegantiarum* at St. Thomas's, was delighted with the *point* of the couplet and chorus, and declared it to be the best thing he had ever heard.

In the course of the evening a Latin ode was handed round the room, which, from the manner in which the lines were disposed, had the appearance of a Sapphic ode; it commenced as follows:—

> Poscimur; si quid nuper otior'
> Lusimus tecum, quod et hunc in annum
> Vivat et plures; age die, Latinum,
> Barbite, carmen.

To this stanza we have of course nothing to object, except the substitution of the words *nuper otiosi*, one of which involves a false quantity, for *cucui sub umbrâ*, for, with that exception, the whole stanza belongs to Horace; of the rest of the ode, the less that is said the better. The following stanza, for instance, betrays such a sublime contempt for quantity, that we suspect the writer must be a professor at some Scotch university:

> Salve, O Britanniæ decus, Machaoniæ
> Artis fons vivus, unde longe fluit
> Ægris perenne succus Hygiæus
> Domi, bellique.

The number of blunders exceeds, considerably, the number of words in this stanza; a proposition which, to a writer so unconscious of the existence of such a thing as metre, would no doubt appear to involve an impossibility. However, we give him every credit for his excellent intentions, and we concur entirely in the sentiments of respect and veneration which he expresses for Mr. Brookes, though we cannot compliment him upon his skill in Latin composition.

---

* See The Lancet, Vol. II. 1st ed. pp. 85-90.

WESTMINSTER MEDICAL SOCIETY.

The meeting of this Society on Saturday last was but thinly attended. Dr. Locock was President for the evening.

A paper was read by a Mr. Bingham, entitled "On the means of preserving the health of Europeans in warm climates." Although critics by occupation, we have no wish to be thought churlish, and must therefore acknowledge, that both Mr. Bingham's manner and matter were equally amusing. The "odd promiscuous tone" of delivery, and peculiarity of diction, were *irresistible*, and their combination produced that which Dugald Stewart would undoubtedly have styled "a pleasing effort of eloquence." Any attempt to sketch such oratory must of course be imperfect, and can convey but an inadequate notion of it to those who had not the good fortune to be present. Mr. Bingham told the Society that he "never was out of England in his life," then spoke of tiger hunts and jungle fevers; the danger of "eating pork in hot countries," and of "exposing the person to moonlight." Flannel (said Mr. Bingham) is a proper article of clothing in hot climates, because it is a non-conductor of caloric. People should not do imprudent things, and if they run into danger with their eyes open, they deserve no pity. Mr. B. proceeded to state, that it was necessary to keep the bowels open in hot climates, and recommended injections of warm water for that purpose, and concluded by quoting the advice of Boerhaave, "Keep your head cool, your feet warm, and your bowels open."

At the conclusion of the paper there was a burst of applause from all parts of the room, which the President with great gravity suppressed.

After a lapse of several minutes, Dr. J. Johnson, and Dr. G. Gregory, simultaneously rose to address the Chair; the latter, however, gave way, and Dr. Johnson began his speech, by complimenting the author on "the luminous paper then before the society." Mr. Bingham, he said, had alluded to the discrepancies of opinion which existed amongst the tropical practitioners, but he (Dr. Johnson) considered that the discrepancies amongst metropolitan practitioners were equally great, for instance, Mr. Abernethy recommended his patients to limit their quantity of food to three or four ounces daily, whilst Dr. Blankhead, or Bankhead (we could not precisely catch the name) prescribed beef steaks and porter to all his patients. He took a review of the exciting causes of disease, as errors of diet, and of clothing, exposure to night air, and intemperance, and said, that the art of preserving health in hot climates consisted in carefully avoiding the exciting causes of disease enumerated above. With respect to flannel being a proper article of clothing as stated by Mr. Bingham, he entirely disagreed with that opinion, "If Mr. B. wore a flannel shirt on the coast of Madras, he would feel such a prickly heat, that he would tear himself to pieces, jump into the sea, and *catch* a dysentery."*

Dr. G. Gregory was much surprised that Dr. Johnson should not have enumerated change of air as one of the most frequent causes of disease to the European visiting hot climates. He did not mean the change from good air to bad, but contended, that simply the change was injurious to many constitutions, and that it powerfully predisposed to disease, and this he laid down as a great pathological fact. (Tut! man.)

Dr. Johnson stoutly maintained, that change of air was one of the most powerful means we possessed of renovating health. So far from being injurious in its effects, it was the highest source of health. He had travelled many thousand miles, and its effects were really *magical*, it increased the powers of his *mind*, as well as of the body, and if he were labouring under chronic disease, he would travel until it was relieved, for he considered change of air to be "worth all the medicines in Apothecaries' Hall." In reply to a question from Dr. Locock, how far the change of scene might not be in a great degree productive of good, by diverting the mind of the patient from the disease under which he laboured, Dr. Johnson remarked, that he could not separate the two circumstances. He only knew of one way in which change of air could be had without change of scene, namely, "by standing on the top of St. Paul's church, and letting the wind blow by! (Here the Doctor laughed, and sat down.)

Mr. Bingham rose to thank the Gentlemen who had been *good natured* enough (what an ambiguous expression) to make remarks upon his paper. There were

* The above is the literal expression of Dr. Johnson; how truly characteristic! "Jump into the sea and *catch* a dysentery, 'and this, too, after the poor devil had torn himself to pieces!

three or four questions which he wished to have answered:

1st, If any, and what injurious effects followed exposure of the body to the moonshine?

2d, What were the ill consequences which arose from eating pork in hot countries?

3d. The nature of the coup de soleil?

Lastly, He wished to inquire whether every proper precaution was adopted to preserve the healths of the soldiers and sailors sent to our colonies?

After some unimportant remarks by Dr. Millington, which were delivered in a very *lady-like* manner, Dr. Johnson was again upon his legs in order to reply to Mr. Bingham's very sensible and judicious questions. With respect to the alleged injurious effects of exposure to the light of the moon, he (Dr. Johnson) regarded such an opinion as mere "moonshine," although he believed that the moon exerted some influence over the human body, and as it rules and regulates the tides of the ocean, why should it not regulate the tides of the body? He had himself experienced changes in the state of his health, which led him to believe he was under *lunar* influence. The Doctor did not inform the Society at what particular time of the moon's age he was under her influence. Hudibras, however, says:—

"The queen of night, whose large command
Rules all the sea, and half the land,
She over moist and crazy brains
In *high spring tides* at midnight reigns."

In reply to the second question, Dr. Johnson remarked, that the great mass of inhabitants in the eastern countries consisted of Mahometans, who considered the hog an unclean animal, and hence might arise a popular prejudice against pork. With regard to the nature of coup de soleil, death arose from acute inflammation of the membranes of the brain, proving fatal in the course of a few hours and arising directly from injudicious exposure of the head to a vertical sun. The cause of sudden death from exposure to the sun, he considered to be extreme congestion of the vessels of the brain.

The meeting was then adjourned, and the members were informed from the chair that in consequence of the ensuing Saturday being Christmas-eve, the Society would not meet until 31st of December.

ON THE STRUCTURE AND FUNCTIONS OF THE SPLEEN.

By Sir A. Cooper.

The following is an abstract of Sir A. Cooper's opinions on the structure and use of the spleen; which were delivered by him to the anatomical class a few days since, in a lecture upon that viscus.

After a few prefatory observations on the figure and relative situation of the spleen, Sir A. Cooper proceeded to speak of its structure; he said, that in addition to the partial peritoneal covering of the spleen, it possessed a proper and peculiar covering, or capsule, which, however, did not merely form a coat to the spleen, but processes of this membrane, which he termed septa, or cords, were sent through its substance, by which means the two surfaces of the covering were united. Sir Astley remarked, that this membrane was *highly elastic*, and to this fact he begged particular attention.—Proceeding next to speak of the internal structure of the spleen, he said, that he considered the opinion of those who contended that the spleen was cellular was undoubtedly true, and, in confirmation of this, he would appeal to the various preparations of this viscus then before him. The splenic artery, he said, was given off from the celiac, and after distributing branches to the pancreas, left side, and cardiac end of the stomach, passes into the substance of the spleen and divides very minutely; the artery does not in itself (said Sir Astley) form the cells, but the branches ramify on the cells. The most curious part of the structure of the spleen, he observed, was in the veins, and here Sir A. exhibited to the class the spleen of an ox and also of a calf, in which the distribution and commencement of the veins were well seen. He compared the internal structure of these preparations with a dried preparation of a turtle's lung, and said, that the similarity was so great, that the lung had been then placed upon the table, by mistake, for a preparation of the spleen. The cells of the spleen Sir Astley remarked were formed by the splenic vein, into which the blood is poured from the minute capillary branches of the splenic artery. In order to illustrate the elasticity of the membrane, or proper capsule of the spleen, Sir Astley introduced a pipe into the splenic vein and then inflated the spleen; it readily admitted of distension, and its size was much increased, but it

was immediately emptied by its own elasticity. By means of an injecting syringe, Sir Astley threw water into the veins of a spleen, upon withdrawing the syringe, and holding the viscus in the hand, it was seen to empty itself and resume its original size. The spleen upon which this experiment was shown appeared very small, but it held twenty-four ounces of fluid. "These were my play-things, gentlemen, (said the worthy Baronet, with a good-natured smile,) when I was ill in the country last summer, and I will tell you the result of these investigations, or rather, the conclusion to which I have arrived respecting the use of the spleen; and it is this—*The spleen is an elastic reservoir and manufactory of venous blood.*"

Sir A. said the blood was conveyed into the cells formed by the splenic vein, and was there retained until a supply of dark blood is demanded for the liver, when, by the elasticity of the investing membrane of the spleen, its contents are propelled. The blood in the splenic veins becomes additionally charged with carbon and forms dark blood, which is necessary to the formation of bile. Sir A. remarked, that the difference between the lungs and spleen was this,—that in the former the blood was deprived of its carbon, whilst in the latter it received an additional quantity. In the spleen of the reptile class, and also in birds, he observed, there were vessels in lieu of cells, and it is only in quadrupeds that the cells can be ascertained.

Sir Astley Cooper next alluded to the hypothesis of Dr. Haighton upon the use of the spleen, which was, that when the stomach was full, it pressed upon the spleen, and thus impeding the circulation through that viscus, the blood was more copiously propelled to the arteries of the stomach, in order that a large quantity of gastric juice might be secreted. Sir A. said if such were the use of the spleen to the stomach, it must also serve for a similar purpose to the pancreas; but he admitted, that it remained for further investigation to prove, what other offices the spleen performed, in addition to that which he conceived to be its principal use.

Sir Astley Cooper concluded his lecture by some general observations on the diseases of the spleen, such as abscess, chronic enlargement, and wounds.

REMEDIES IN GONORRHŒA.

To the Editor of THE LANCET.

SIR,—Notwithstanding the high encomiums bestowed by Sir Astley Cooper, and others, on the Cubeb pepper for the cure of *recent* gonorrhœa, I am sorry to say, that, in my practice, which is extensive, it totally fails in above one half the cases. I generally administer from an ounce to an ounce and a half, in six or eight doses, every twenty-four hours, during four, five, or even six days. To patients of an irritable constitution, I give about half that quantity.

In speaking with an *old sailor* the other day, he surprised me by remarking, that *Jack Tar's* mode of treating gonorrhœa was as good as that by cubebs. "You tell me," said he, "that cubebs stimulate and change the action of the affected parts. Now, I suppose *powdered black pepper and gin*, mixed together, act in the same manner; and many a good fellow has been cured by this remedy, instead of being entered on the sick list of the ship's crew."

The tar's information is quite novel to me, and, I have no doubt, will prove so to many of the readers of THE LANCET. I am determined to try the effects of *pepper and gin* among my own patients. As the remedy seems very feasible, I recommend it to the notice of the medical world. The result should be made known in due season.

I am, &c.

IMPARTIALITY.

MISCELLANEOUS OBSERVATIONS ON THE OPERATION OF LITHOTOMY.

To the Editor of THE LANCET.

SIR,—In consequence of having read the report of Mr. Shaw's unfortunate operation of lithotomy, and the observations of some of your correspondents respecting the cause of the patient's death in THE LANCET, I have turned my attention to the subject, and send you the following remarks for insertion in that useful miscellany.

I am, Sir, &c.

A TRAVELLER.

One of the reporters of THE LANCET has already quoted Mr. Shaw's opinion, with respect to the occurrence of hæmorrhage, after the operation of lithotomy, and I think it may be useful to contrast the opinions of two of the most eminent

practical surgeons of the day, both in reference to that gentlemen's statement, and to the death of his patient. Besides, it may be of advantage to members of the profession, who have neither opportunity nor time for doing so themselves.

Mr. Charles Bell, in treating of hæmorrhage after the operation of lithotomy, says:

"The blood must flow either from the *transversalis perinæi*, or from the *artery of the bulb*, or from the trunk of these, the *internal pudic*. The first of these is always cut; the second too often needlessly, and yet it is not easy assuredly to avoid it; the last is often cut, and the patient sometimes dies. *It is the most inexcusable cause of failure when the patient dies of bleeding.*"*

I would recommend Mr. Shaw to ponder well his eminent brother-in-law's decision, before he publishes another edition of his 'Manual,' or again ventures to cut into the urinary bladder of a patient.

After alluding to the manner to avoid cutting the artery of the bulb, Mr. Bell says, "The artery goes twisting under the ramus of the os pubis, and dives deep into the bulb of the urethra. Sometimes *it passes across so low that it must be in the course of the incision.* I think I have seen this artery cut in a boy, and cause fatal hæmorrhage."† Why did not Mr. Shaw introduce this *saving clause* into his 'Manual,' and thus, not only have had an asylum in the day of disappointment, but also have prevented his antagonist from saying to him: *Out of thine own mouth I will judge and condemn thee.* Had Mr. Shaw never written a word about the operation of lithotomy, his unlucky case might not have made much noise, and, at all events, he could even have sheltered himself under the wings of Sir Astley Cooper.

This celebrated surgeon thus speaks on the point under discussion: "It is quite contrary to my experience to say, that persons do not die of hæmorrhage after this operation, (lithotomy,) for I have known *many instances of it;* four in particular, in which *death was the immediate consequence of bleeding*, suffered to continue for several hours; and several I have known die from gangrene of the scrotum occurring after severe hæmorrhage. The patient should never be left until the bleeding has ceased; and if it be very considerable, the surgeon should place his finger within the wound, and compress the bleeding vessel; but he should be careful *not to quit his patient whilst any hæmorrhage remains.*"* The conclusion from all these remarks is, that it is not an uncommon occurrence for a patient to die from hæmorrhage; *ergo* Mr. Shaw's case was not so extraordinary as some seem to imagine.

Notwithstanding what Bell and Cooper say upon hæmorrhage, I am inclined to think that it almost never happens that a professed lithotomist loses a patient from this cause; and that such an accident only occurs to surgeons who rarely perform the operation. I have never heard of such an event happening in the practice of several lithotomists, with whom I have been acquainted in different parts of the world; but on this point I cannot speak with decision, because I have no data before me. It may be remarked, however, that as most distinguished operators have many enemies eagerly on the watch to blast their reputation, most of their unsuccessful cases must be heard of, even should they wish concealment.

I should be delighted by any information respecting the results of the operations of Mr. Martineau, of Norwich, in reference to hæmorrhage. How many of a given number has he lost by this accident? Did he ever lose a single one?

Sir Astley Cooper states in his Lectures, that the number of deaths from the operation of lithotomy, taking all ages, "is one to eight." Now I should like much to know, upon what basis this calculation was made; is it merely from the result of Sir A. Cooper's own operations? Is it from the result of the operations of any particular hospital, or district, or town? Is it from the result of the operations of any celebrated lithotomist, or of those of all the lithotomists of Great Britain: Is it from the result of the operations of the Continental Surgeons? I ask these questions, because it strikes me that the proportion of deaths is either *much overrated*, or is drawn from the records of *very unsuccessful operators.* I apprehend that none of the distinguished lithotomists of the Continent, nor even Mr. Martineau (who, I believe, does not lose one patient in 20 or 30) would be flattered by the statement, that they lost *one of every eight patients* on whom they have operated, from hæmorrhage. I wish, therefore, to turn the attention of surgeons to the determination of the number of deaths that occur among a given number of patients who have submitted to the operation of lithotomy among the surgeons *ge-*

* Operative Surgery, vol. i. p. 218.
† Operative Surgery.

* Cooper's Lectures.

nerally of any district, town, or country, and to the records of the operations of dexterous lithotomists *individually*. From such reports, some curious and important data might be obtained. But to this point, as well as to the relative number of deaths from hæmorrhage, I shall recur at a future period. Meantime I would cordially invite my professional brethren to communicate any information they may have acquired on the subject through THE LANCET. I would at the same time admonish them to keep strictly to the *truth, without the least partiality*. Facts alone are wanted, and from them sound deductions may be made by every individual. I shall now turn to another point.

I am anxious to know what proportion of patients have been operated upon for *stone in the urinary bladder, in whom no stones were found at the time of the operation, nor even afterwards*: and also in how many, and in what peculiar circumstances stones were discovered, hours or days, or weeks, after the patients were removed from the operation table. A correct list of all such cases, with the names of the operators, would be a curious and useful document.

Such an event as that alluded to is by no means a rare occurrence, even among the first surgeons of this metropolis. Could any reader of this miscellany tell me whether such an accident ever happened to Mr. Martineau, or to Mr. Giltebrandt of Moscow?

On my way from the East, a short time ago, I became acquainted with an English physician settled at Moscow, who ardently recommended me to witness the performance of the operation of lithotomy by Professor Giltebrandt, and who furnished me with an introduction to that gentleman. As the Professor operates two or three times every week, in a couple of days I was not surprised when a polite note summoned me to attend at the Hospital of the Dowager Empress, at eight o'clock in the morning. As the invitation was much desired, I did not fail in the punctuality of attendance.

Before going farther, I must remark that Professor Giltebrandt has long been celebrated as a lithotomist at Moscow; that he operates very frequently both in public and private practice, and that his success has brought him patients from very distant parts of the Russian empire; and that the coolness, the dexterity, the neatness, and the celerity with which he executes his operations, astonishes every beholder. I must also premise that Mr. Giltebrandt is an open-hearted, uncere-monious, and not over polished gentleman, whom you never find without his pipe in his mouth; indeed it has been said, that he falls asleep while smoking in bed. Be this as it may, in all societies, in his dining-room, in his drawing-room, in his study, the pipe only quits his mouth for the time absolutely necessary to eat, drink, and speak; but in truth, he sometimes both drinks and speaks while he continues smoking. Even while riding in his open carriage through the streets of Moscow, the fumes of tobacco often tell the inhabitants of the approach of Giltebrandt. In case his pipe should be extinguished, like many other foreigners, he carries a tinder-box in his pocket, and is often seen striking his flint and steel while in the houses of strangers, rather than call for a light. Having said so much about the Professor and his pipe, the reader will not be astonished at being told that he continues the puffing system during his operations.

The patient on whom I saw Mr. G. operate on the day appointed, was a boy about three years of age. The incisions were made, the small gorget was introduced, and the stone was extracted in a manner that highly pleased me. To tell the truth, the business was finished with so little fuss and with so much ease and dexterity, that I could scarcely believe my own eyes, or that I had witnessed the performance of a capital operation. The patient, as usual, did well.

I shall now describe the general procedure of Mr. Giltebrandt's operations. His well accustomed and well instructed assistants having all things prepared for the operation, the Professor enters the room with his pipe in his mouth, and converses with all around him in the most affable manner, till it is notified that the patient is *quite ready*, i. e. that he is placed upon the table, that he is properly secured, and that the staff is already introduced into the bladder. One of the assistants having put a scalpel into Mr. Giltebrandt's hand, after a *puff, puff, puff*, he makes an incision into the groove of the staff;—*puff, puff, puff*;—he cuts into the bladder either with the knife, or, in children, with the small gorget; *puff, puff, puff*;—he introduces the forceps into the bladder and extracts the stone;—*puff, puff, puff*; (if there be more calculi than one, there is a *puff, puff, puff* between their extraction;)—he injects the bladder, *puff, puff, puff*; and then he turns round, and enters into conversation with the by-standers as if he had been merely carving a fowl, or cutting up a joint of meat; nay more, he sometimes

converses even while making his incisions. The patient is now left to the management of his assistants; the Professor sets off to visit his patients in Moscow, and, unless sent for, he does not return to the Hospital before the following morning. It must not, however, be inferred from these circumstances, that Mr. G. does not attend to the preparation of his patients for the operation, or that their after-treatment is neglected. On the contrary, to both points he is very particular; but his assistants being experienced surgeons, and intimately acquainted with his practice, he has complete confidence in their skill and management.*

The following remarkable contrast to Mr. Giltebrandt's total *sang froid* is well worthy the perusal of the medical world:

"The best lithotomists," says Mr. C. Bell, "whom I have seen operate, have gone to work with anxious feelings.—Cheselden confessed that he suffered an anxiety, even to sickness, before operating, and until the immediate call upon his resolution and firmness banished all thought of the precarious nature of the operation, and the anticipation of the infinite variety of ways in which discomfiture overtakes the surgeon. For my own part, I have seen many good surgeons operate, but those who have been the most confident, and boasted the most of their uniform good success, have generally failed in some essential circumstance when I had the opportunity of attending their operations."†

I have often witnessed the operation of lithotomy, performed in various ways, and my own observations, with the single exception of Mr. Giltebrandt, are quite in unison with those of Mr. Bell. How much bungling and sad—yea—horrid work have I witnessed!!!

I shall now insert a quotation, which was pointed out to me by a friend, in Dr. Lyall's ponderous quarto. After describing the hospital which was founded at Moscow, by the Dowager-Empress Mary, and hence called *Mary's Hospital*, the Doctor adds the following remarks:

"A large number of patients annually undergo the operation of lithotomy in this hospital. The operator is Professor Hiltebrandt, (or rather Giltebrandt, with all deference to our author,) of the Medico-Chirurgical Academy, whose dexterity and celebrity in performing it are wonderful, and his success so great, that to hear of the death of one of his patients, either in public or private practice, is a very rare occurrence. It is greatly to be desired, that the results of the Professor's practice, and his mode of treatment, should be given to the public, and he speaks of publishing. He has performed the operation spoken of above a thousand times."*

To be sure the work of Dr. Lyall is not a medical one, but I am surprised that this author did not give some more precise information, with regard to a subject which he must have known would highly interest the profession. Some tabular statement of the results of Mr. Giltebrandt's operations, and a few remarks on the preparation of the patients, the instruments used, the after-treatment, &c., might, with great propriety, have been introduced into his work. Motives of delicacy, however, may have prevented the Doctor from even telling all he knew on these points; it might have been reckoned an anticipation of the work of *his friend*, the learned Professor. I wish, however, that these remarks may *stimulate* Dr. Lyall, and *elicit from him* further information while awaiting Mr. Giltebrandt's own publication.

* I was also introduced to two Russian surgeons at Moscow, who are distinguished as general operators; Professor Muchin, and Mr. Kamenskii. The latter is also a dexterous lithotomist, and operates very frequently and very successfully.

† Bell's Operative Surgery, vol. I., p. 193.

* The *Character of the Russians* and a *Detailed History of Moscow*, by R. Lyall, M. D. p. 425.

CHARCOAL IN PHAGEDENA.

To the Editor of THE LANCET.

SIR,—As it is necessary that the mind, when engaged in making observations, should be unswayed by prejudice, so is it equally essential, for the establishment of a practical inference, that we should apply our reason correctly on the phenomena presented to us. These remarks, suggested by the perusal of a communication from Mr. Wansbrough, inserted in a late number of your valuable publication, I beg leave to submit to the notice of the medical world through the same scientific medium.

Observing the beneficial effects of the application of charcoal, or carbon, in cases of sloughing phagedena, Mr. W. supposes that its active properties depend on the carbonic acid which, he assumes,

it contains. Now I am somewhat surprised, judging from his previous writings in other journals, that he should have fallen into such an error; for to assume that carbon owes its efficacy to carbonic acid, which science teaches us is formed by its chemical union with oxygen, it would be first necessary to establish the source from which the adequate quantity of oxygen is derived. The question then arises, Whence is the oxygen? It appears to me that there are only two natural sources from which it *may* be obtained—first, the atmosphere, and, secondly, the water that enters into the formation of the poultice. While I admit that these may furnish the necessary supply of oxygen, I cannot but acknowledge that it appears to me very improbable, more especially when it is considered, that to produce the result of chemical action between these substances, in any degree sufficiently capable to have an evident influence over the cases alluded to, a considerable elevation of temperature is required. Granting that carbon, from being exposed to the atmosphere in the state of minute division, should, through its superior affinity for oxygen, become converted into acid, that source is negatived by Mr. W.'s own words—"the charcoal was never reduced to *powder* until required for use;" following out the sentence we have, "lest it might part with its essential property, in which I presumed its efficacy resided." From this it might be inferred, that the second source, viz., the water, entirely escaped his observation; and that he believed its active property was something *volatile*, but, as I have endeavoured to show, not carbonic acid; indeed, were it so, we have a much more eligible application in the substance of beer-grounds.

The fact that carbon occasionally has a salutary influence over various kinds of ulcers no one can dispute, but that its efficacy depends on a volatile principle, or on any other than that of a mechanical stimulus, admits of great doubt.—The majority of surgeons, who have had opportunities of observing its action have, I believe, arrived at the same conclusion.

Although I have no reason for doubting the purity of Mr. Wansbrough's intentions, arising from a desire to see the advancement of surgery keep pace with other sciences, yet I may be allowed, in conclusion, to suggest, without being supposed not to encourage the speculations of ingenious minds, the propriety of bearing in mind the lesson which is conveyed in the few following words—"bad advocates are worse than none."

I am, Sir,
Yours most obediently,
Clapham, Dec. 12th. ** M——.

OPERATING THEATRE, BARTHOLOMEW'S HOSPITAL.

To the Editor of THE LANCET.

SIR,—Having shown yourself ready to publish all commendation merited by our Hospital Attendants, and ever vigilant to expose their neglects, I send you a few remarks on a regulation at St. Bartholomew's that would do honour to all other public chirurgical schools, if copied and adhered to.

In the operating theatre is a board, on which is a notice to the pupils, to the effect, that the area of the theatre is appropriated to THE Surgeons and the Dressers of the Operator only; the first row to the other Dressers, and the remaining rows to the Pupils.

By the definitive before the word surgeons I, of course, understand the surgeons of THE hospital only; if I be mistaken, be kind enough to remove my error.

The peculiar advantages to operator, pupils, and patient, resulting from an exact observance of this notice, must, I think, be evident to all, and the evils resulting from its converse was much felt (as usual) last Saturday.

A boy was placed on the operating table, his leg exposed, an incision commenced, blood appeared, but here ended the operation to the pupils, for ALL the dressers, the *strangers*, and *others* immediately closed in upon the poor boy and the operator, that the one was incommoded, and the other, in agony, kept crying, "open the window!—I'm so hot! —O, open the window!" Nevertheless, they continued their situations till the operation was completed.

Should you consider this flagrant breach of one of the most equitable regulations that have regard to the Pupils of St. Bartholomew's, worthy of remark, you will oblige by the insertion of these observations.

As to the *strangers* who obtrude themselves in the area, they will be very welcome to a seat beside

Your humble Servant,
H. T.

ON AN INSTRUMENT RECENTLY USED BY MR. CRAMPTON IN AN OPERATION OF LITHOTOMY.

To the Editor of THE LANCET.

SIR,—In Number 117 of THE LANCET, your correspondent "ERINENSIS" gives an account of an operation of lithotomy, which was lately performed at the County Dublin Infirmary, but in his anxiety to be severe, he has lost sight of that accuracy which should distinguish a medical communication. The operation was performed in the presence of nearly two hundred persons, among whom were, I believe, all the eminent surgeons in Dublin; the circumstances attendant upon it must therefore be perfectly well known to all those who were so situated as to be enabled to see the proceedings of the operator. That your correspondent was not so circumstanced must appear from the following brief statement of the facts, for the accuracy of which I of course must be held responsible to you and the highly respectable gentlemen who witnessed and assisted at the operation. Passing over without comment the offensive allusion to myself, I shall confine my observations to that which alone can be interesting to the profession, namely, the facts of the case.

First, then, "the instrument which was substituted for the forceps," although *made*, was not *invented* by me; for its merits or its defects Mr. Crampton is alone responsible.

Secondly, a reference to the drawing of the instrument, which I take the liberty to subjoin, will be sufficient to show that your correspondent's description applies to a *totally different instrument*, which, although lying on the table, was not made use of in the operation, nor even intended to be so employed.

Thirdly, it is sufficiently obvious that no "force" could be required to push an instrument, such as is represented in the annexed drawing, into the bladder; it was accordingly passed into the bladder with the greatest facility, upon the finger, which had been previously introduced as a director into the bladder.

Fourthly, the instrument was not "twisted about for a quarter of an hour," for, at the first attempt to rotate it in the bladder, the handle, which had been insecurely fixed, separated from the shaft; *the instrument was therefore withdrawn in less than a minute, and no other instrument of the kind was introduced.*

The extraction of the calculus was afterwards effected by the common forceps.

It is proper however to mention, and it perhaps accounts for the mistake into which your correspondent has fallen, that Mr. C. introduced in succession three different pair of forceps, the blades of the first two pair being so wide apart as to be unable to hold a calculus of so small a size; with the third pair the stone was easily seized and extracted.

Lastly, your correspondent inadvertently omitted to mention, that the operation was not succeeded by the slightest untoward circumstance, and the child left the Hospital pefectly healed on the twenty-first day.

I remain, Sir,

Your obedient servant,

FRANCIS L'ESTRANGE.

35, Baggot-street, Dublin,
December 9th, 1825.

P. S.—I may just observe that Mr. C. has made repeated experiments with the instrument on the dead subject, in the presence of myself and of several other professional persons, and invariably succeeded in extracting a stone from the bladder with the greatest facility. His manner of using the instrument is as follows:—

The fore-finger of the left hand used as a director, the instrument in its closed state (Fig. 1.) is introduced into the bladder. By pushing down the button C., with the thumb of the right hand, the blade B. is raised from A. and the instrument is opened in the bladder.—The calculus being stopt by the fore-finger of the left hand, which just touches it, a movement of rotation is given to the instrument, by which the stone is pressed into the bag (which is attached to the holes in the blade A., and round the side B.) the button B. is then allowed to recoil, by which the mouth of the bag is closed, the elastic blade B. descending to the dotted line D. The instrument is then withdrawn, and the stone is found enclosed in the bag.

Fig. 2.

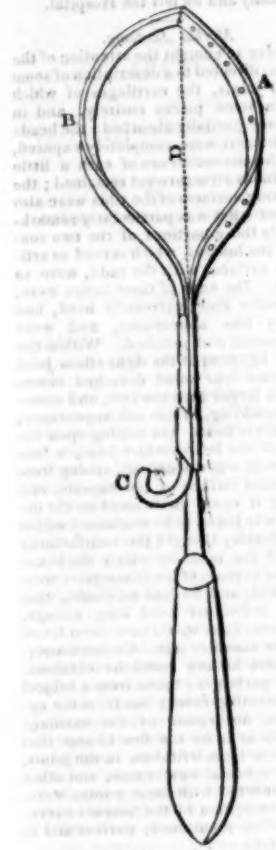
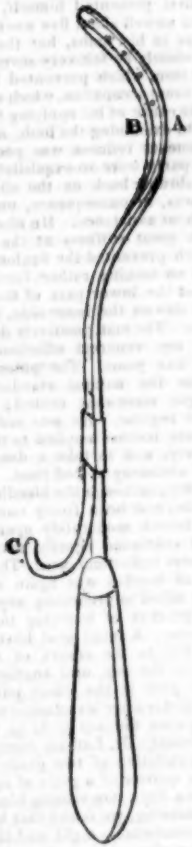


Fig. 1.



HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

Case of Periostitis.

James Emmett, a man of rather spare habit and light complexion, aged 45, was admitted, about a month since, under the care of Dr. Latham. He stated, when he first presented himself, that he had been unwell about five weeks, with slight pains in his limbs, but that a few days previously he felt very severe pain in his left shin, which prevented him pursuing his usual occupation, which was the immediate cause of his applying for admission.

On examining the limb, no very great cutaneous redness was perceptible, but the parts were so exquisitely tender that he shrunk back on the slightest touch; he was, in consequence, unable to walk without assistance. He also complained of a great stiffness at the elbow-joint, which prevented the flexion of the limb, and on making rather forcible pressure about the lower part of the upper arm, and also on the inner side, it occasioned pain. The man positively denied having had any venereal affection during the last five years. The pulse was rather above the natural standard, and the tongue somewhat coated; the bowels were regular. He was ordered to have twenty leeches applied to the leg immediately, and to take a dose of calomel and antimony at bed time. The following day, although the bleeding from the leeches had been freely encouraged and the bowels moderately opened, yet the pain continued equally severe, and the redness rather increased. The same number of leeches was again applied, but they failed in producing any alleviation, except that of lessening the cutaneous redness. A small oval blister was now ordered to the centre of the anterior part of the leg, and another about the back part of the elbow-joint. On the fourth day after his admission, finding the symptoms did not yield to this plan of treatment, Dr. Latham commenced with the exhibition of two grains of calomel and a quarter of a grain of opium, three times a day. On visiting him the following morning, we found that he had passed a comfortable night and the limb was much easier. He continued to take the calomel and opium, and on the following day there was ptyalism, and with it the pain had completely subsided; it was, indeed, surprising to observe the great change that had taken place within the last 48 hours; he could now walk on the limb with ease, and had nothing to complain of but the stiffness in the arm. The calomel was persisted in (but in smaller and less frequent doses) for about three days longer, at which time the rigidity of the arm had so far diminished that he was capable of conveying any thing to his mouth, which he was quite unable to do before. The medicine was now discontinued, and, after remaining a few days longer, some occurrence called him to his family and he left the Hospital.

Morbid Anatomy.

Saturday se'ennight the attention of the Class was directed to a description of some diseased joints, the cartilages of which were, in some places entirely, and in others only partially absorbed; the heads of both humeri were completely exposed, but on the circumference of each a little cartilaginous structure yet remained; the articulating surfaces of the tibia were also bare; but what was particularly remarkable, only those portions of the two condyles of the humeri, which served as articulating surfaces with the radii, were so exposed. The ends of these bones were, at the same time, extremely hard, had an ivory-like appearance, and were highly smooth and polished. Within the capsular ligament of the right elbow-joint were found four small detached bones, one much larger than the rest, and somewhat resembling, in size and appearance, a small horse bean. On cutting open the capsule of the left shoulder-joint, a fungous growth was discovered, arising from the internal surface of the capsule, and on laying it open, an evident ossific deposition was found to be contained within it. Mr. Stanley thought this satisfactorily explained the mode by which the bones within the capsule of the elbow-joint were first formed, and he had no doubt, that had the individual lived long enough, similar formations would have been found within the shoulder-joint. Unfortunately, no previous history could be obtained, since the parts were taken from a subject in the dissecting-room; but from the appearances, absorption of the cartilage would appear to be the first change that takes place from irritation in the joints, since the synovial membranes, and other parts connected with these joints, were, with the exception of the fungous excrescence before mentioned, perfect and in a sound state.

*** The price of THE LANCET after the 31st of the present month, will be *Eight Pence;* the back numbers from the period at which the pages of this publication were enlarged and a wrapper added to it, will also be sold in future at that rate.

THE LANCET.

LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND DISEASES OF THE EYE.

By MR. LAWRENCE.

London Ophthalmic Infirmary, Moorfields.

Lecture VII.

Of the Treatment of Ophthalmic Inflammation.

Gentlemen,

It is a trite maxim, in the treatment of disease, to commence by removing the cause, and the propriety of this course is particularly obvious where the cause is mechanical, as in the case of extraneous substances getting into the eye. They irritate the organ and produce an increased lachrymal discharge, which is sometimes sufficient to remove the offending cause, as in the case of substances in fine powder, or of acrid matters, such as snuff, pepper, salt, &c. Chemical agents are generally found to have produced their full effect before we see the patient. A particle of nitrate of silver destroys the surface it touches, but it is so quickly decomposed by the moisture of the organ that its caustic action is not deep. Lime in a pure state applied to the cornea turns it to a dead white colour, like that of marble, or like the boiled crystalline lens of a fish. It not only completely destroys the transparency of the cornea, but entirely decomposes its texture, reducing it to a minute powder, which may be brushed off by a camel-hair pencil. The effect of mortar, which gets into the eye much oftener than lime, is less injurious in degree; it turns the cornea white, but does not decompose its texture. Lime and mortar destroy the surface of the conjunctiva, giving it a soft, pulpy, coagulated appearance; the portion deprived of vitality is of a dead white, and as the effect is usually partial, the membrane appears marbled. Any particles of these matters should be immediately removed; and if you should think it probable that the caustic action of the lime is not at an end, you may apply vinegar and water to the eye.

The most common cases requiring our assistance are those in which minute particles of dust, or other matters, are blown into the eye, and either lodge on the external surface of the globe or stick in the mucous lining of the palpebræ. In either case the organ experiences considerable irritation, for, whenever the globe or lids are moved, the foreign substance scratches the opposed sensible surface and causes acute pain; so long as the eye is at rest, the patient does not suffer. In order to discover and remove any minute substance of this kind, you should first look attentively at the exposed surface of the organ in a good light; if you discover nothing there, you should proceed to depress the under lid and bring the lower surface of the globe into view by desiring the patient to look up to the ceiling. If you find nothing here, direct the patient to look in the opposite direction, and raise the upper lid, so as to bring into view the superior surface of the globe. In most instances these substances stick in the concavity of the upper lid, and cause exquisite pain by scratching the very sensible surface of the cornea, whenever the lid is moved the suffering is much greater than when the substance adheres to the cornea. In order to discover and remove them, when thus situated, you must evert the lid, which is very easily accomplished. Take the cilia between your finger and thumb and draw the lid downwards; press with a probe steadily against its upper part; then carry the ciliary margin upwards and backwards; you thus turn the lid inside out and immediately see whether any extraneous body lodges there. This is a simple mode of examining the lid under various circumstances; it gives no pain, and indeed hardly any inconvenience to the patient. When you let go, the lid returns of itself; if it should not, you immediately replace it by drawing

the ciliary margin gently downwards. Small particles of metal, particularly steel or iron, flying off under the hammer, or file, or in turning, strike the eye with considerable force and become embedded in the cornea, presenting a small point of a brown or reddish hue, which cannot be detached with a probe. We must remove these with the point of a cataract needle. Let the patient sit down opposite a window, and placing yourself behind, separate the lids with the fingers of one hand while you use the needle with the other. When you have a clear view of the particle, direct the patient to look steadily at one object, so as to fix the eye in that exact position, then bring the point of the needle to the edge of the substance, and passing it under, lift the foreign body out. Sometimes you succeed better with the patient standing, placing yourself in front. Particles of steel or iron leave a light brown stain on the cornea, which disappears in a day or two. When such substances are deeply sunk in the cornea, it is no easy matter to detach them, and the difficulty is increased by the irritability of the eye, which is turned away involuntarily when the patient sees an instrument approach. More injury may be produced by persevering in our attempts than by suffering the substance to remain. If it is left, ulceration will take place, loosening, and ultimately detaching it. Sometimes foreign substances, particularly if small and smooth on their exposed surface, stick in the cornea for many days, even for weeks or months, without exciting inflammation, or causing much uneasiness. In other instances they bring on inflammation very quickly; ulceration soon occurs, and the irritant is thus removed.

Sometimes foreign bodies of some size get entangled in the loose folds which connect the conjunctiva to the globe, and remain there for a considerable time. I recollect removing a bit of twig from the bough of a tree, which had lodged in this situation, and remained there for several weeks. The patient was not aware of the existence of any foreign substance in his eye. A gentleman consulted me on account of uneasiness in the eye; he stated that he had been on a journey three or four weeks before, and that in travelling on the road a small insect flew into his eye; he was not, however, disposed to attribute his present suffering to that circumstance. On everting the lower lid, I found the wing cover of a minute species of beetle, lying on its inner surface. After this had been removed, he said he still felt something in the upper lid, and upon everting that also, I found the other wing-cover of the same insect.

This is all that I have to communicate with respect to extraneous substances getting into the eye. The directions given in books on this subject are in general of very little use. Beer is tediously minute in describing every variety of extraneous matter by which the eye can be injured, in laying down rules of treatment; but he does not even mention the simple proceeding of everting the upper eyelid, which enables us to give the necessary relief in the great majority of cases. Injections of water and milk and water under the lids, and over the surface of the eye, are recommended; these are of no use, and indeed can only add to the irritation which already exists. If any injection could remove the foreign body, the flow of tears, which its presence excites, would be sufficient; when it sticks to the concavity of the upper lid, injections are wholly ineffective.

Removal of the cause, even when of a mechanical nature, does not always put a stop to disease. Inflammation, if fully developed, may still go on. Whatever further measures we may adopt, it will be necessary to protect the eye from injurious external influences. Employment of the inflamed organ irritates it, and increases the inflammatory disturbance, and aggravates the sufferings of the patient. In serious cases the eye must remain perfectly at rest, and even in slighter inflammation, active exertion of the organ should be discontinued, as in reading, writing, &c., although passive exercise of it may be allowed. This rule applies to the sound eye, when the other is the seat of violent inflammation. A similar remark may be made with respect to exposure of the organ to light, which, indeed, the patient himself is disposed to avoid. In the worst cases, the patient should be kept in a darkened room, the curtains and shutters being closed. This, however, is not often necessary; it will be sufficient in general to moderate the afflux of light by the ordinary Venetian blinds, and to protect the eye by the common pasteboard shade, covered with green crape or silk.

It would be obviously injurious to expose the inflamed eye to a cold air in windy, rainy, or damp weather, and great vicissitudes of temperature should be avoided; but it is not necessary to guard the eye against the effects of air in favourable states of the atmosphere. A warm, mild air, so far from being injurious to the organ, is grateful to the feelings of the patient, and beneficial to his general health.

The means which I have now mentioned are only to be considered as preliminary and auxiliary to the grand and principal object, which we have in view, that of arresting inflammation by appropriate treatment. Although the process of inflammation is in many cases very violent, and though the sufferings which attend it are often extremely acute, yet its tendency, and effect, with reference to the termination of the disturbance, are upon the whole restorative. Within certain limits, it does not tend to disorganize and destroy the part; but is rather calculated to bring it back to a healthy state; to render it capable of resuming its healthy functions. Thus it may arise, become fully developed, and decline in an organ, without any medical treatment; leaving the part as healthy as it was before. When violent, however, it suspends the functions of a part; hence, in organs, whose constant exertion is necessary to the continuance of life, it must be speedily arrested, or life will be lost. But the eye does not belong to this class; and we are guided by another view in the treatment of ophthalmic inflammation. We look at the change which inflammation is capable of producing in the texture of the inflamed part. By the interstitial deposition of new matter, inflammation causes thickening or swelling; it renders parts, which are naturally transparent, opaque; and it consolidates and unites those which were previously loose in texture and separate. Hence serious consequences to vision may result, not merely from violent inflammation, but from such a degree of it, as in most other instances would be deemed unimportant. It becomes necessary, therefore, to institute early, and to follow up steadily, bold and decisive antiphlogistic treatment, not with a view of removing danger to life, nor on account of the sufferings of the patient, which may not be very acute, but to prevent any injurious changes in an organ, the perfect state of which is essential to the comfort and enjoyment of life. In order to accomplish this object, you may inquire whether it is necessary to take blood from the system generally, or whether local depletion will answer the purpose. Medical writers and practitioners have been usually satisfied with local bleeding; they do not seem to suspect that an inflammation of the eye can require more than the application of leeches. But if you mean to prevent change of structure in the organ, you must act much more decisively and vigorously. You will find it very often necessary to bleed from the arm, and that freely. The external situation of the eye enables us to see the decided effect which bleeding, carried to its full extent, has in putting a stop to inflammation of the organ. I know no other example, in which the efficacy of general bleeding in arresting local inflammation is brought to so clear a demonstration. You will see the eye of a vivid red colour, and the patient evincing the most acute sensibility on the influx of light; bleed him to fainting, the capillaries will be emptied, the organ resumes its natural paleness, the full influx of light can be borne without the least painful sensation. The eye is for the moment restored to a perfectly natural state, and we cannot doubt that a measure of this kind must act most powerfully in arresting the progress of the inflammation. A single large bleeding will in general be sufficient to accomplish our object. I am not inclined to measure the quantity of blood to be taken by ounces, but by the effect produced upon the system; bleed till the circulation decidedly feels the loss, and in severe cases, where the eye is in danger, till fainting is produced. I have invariably seen the most beneficial results from this mode of proceeding.

In cases of inflammation affecting the entire globe of the eye, in inflammation of the external proper tunics affecting both eyes, or where it is very severe in one, general bleeding should be resorted to.

The next mode of taking blood in point of efficacy, is by cupping, either from the back of the neck or the temple, especially the latter, from which part blood can be obtained quickly and in large quantity. Branches of the temporal artery are commonly wounded in this operation, facilitating the abstraction of the blood, and causing neither danger nor inconvenience. At this Infirmary we are constantly taking blood from the temple by cupping, with the best effect.

Blood may be drawn from the eye by the application of leeches; and these should be applied as near to the part affected as possible. The best situation is upon the lids; the only inconvenience which results from applying them here is a slight ecchymosis, which occasions for some time an unpleasant appearance. It has been proposed to apply them to the mucous lining of the lower lid that they may draw blood directly from the conjunctiva; they are easily put there, but the application of them to the external surface of the lower lid will answer the same purpose.

There are other means of taking blood besides the three methods I have men-

tioned. Opening the temporal artery is not in my opinion so advantageous or convenient as cupping. We sometimes do not get blood enough in this way, and sometimes there is either a difficulty in stopping the bleeding, or it breaks out again. To prevent this, compresses are placed on the artery, and secured by a bandage encircling the head, the pressure of which on the brow and forehead often renews and aggravates the sufferings of the patient. The subsequent formation of a small aneurism is not a very uncommon consequence of opening the temporal artery; it requires an operation for its cure. Opening the jugular vein is a troublesome and inconvenient operation; and you are frequently unable to get the quantity of blood you want in this way; it is now seldom resorted to, at least in ophthalmic cases.

The application of leeches is recommended by some of the continental writers, not to the eye, but to other parts of the body. These writers lay great stress on the influence of suppressed discharges in causing ophthalmia, and consider that the organ will be most naturally relieved by reproducing the discharge, or by drawing blood from the part which has usually poured it out. They accordingly recommend the application of leeches to the labia pudendi, to the anus, and to the alæ nasi, when the ophthalmia is supposed to arise from suppressed menstruation, hæmorrhoidal discharge, or epistaxis. This seems to me a very roundabout way of getting at the inflamed part; and it is a kind of refinement that must have proceeded from learned heads. Common sense would never have suggested the application of leeches to the anus for curing an inflamed eye.

Scarification of the conjunctiva used to be a very general practice, and is still employed much more frequently than it ought to be. Can we expect to diminish inflammation by making a number of wounds on the inflamed part? Can we doubt that such a proceeding will increase the mischief? It gives considerable pain, and causes very little discharge of blood. In active inflammation, therefore, scarification of the conjunctiva must be absolutely prescribed, and there are very few cases of chronic ophthalmia in which it is beneficial.

In pursuance of the antiphlogistic treatment, you must not only diminish the circulating mass by taking away blood, but cut off the supplies by freely evacuating the alimentary canal, and restraining the patient to a low diet. In the first place you must clear out the stomach and bowels by an active purge of calomel combined with rhubarb, extract of colocynth, or jalap, or followed by the common aperient mixture of infusion of senna, salts, and manna. You afterwards give saline medicine, with antimony or nitre, to produce perspiration, and administer saline aperients occasionally, so as to produce regular action of the alimentary canal. In cases of severe inflammation the patient must be put on a fluid or spoon diet. Even in milder attacks, fermented liquors or animal food ought not to be allowed: the diet may consist of broth, puddings, and of farinaceous vegetables, tea, coffee, bread, and butter, and articles of that kind. When the loss of blood is required, it would be inconsistent to allow solid animal food or fermented liquors in any shape. After these measures have been adopted, you may employ counter-irritation by the application of blisters at the back of the neck, or behind the ear. In active inflammation, you should never apply them nearer the organ than these situations; blisters on the forehead, side of the cheek, or temple, are decidedly injurious in many cases, as the inflamed organ is included within the sphere of their irritation.

The use of antimony in large doses, so as to produce and keep up full vomiting for two, three, or four hours, has been recommended with the view of cutting short acute ophthalmia at once. Undoubtedly an emetic administered in this way is calculated to produce powerful effects from the universal sympathy of the system with the important organ on which the remedy immediately acts. It diminishes the heart's action, lessens the force and frequency of the pulse, and certainly so far lessens the degree of any local inflammation. But severe as this remedy is, when thus employed, it will not accomplish the purpose; we cannot depend on it for cutting short inflammation of the eye. Moreover, although it depresses the action of the heart, the violent straining of vomiting causes congestion in the head, and thus acts unfavourably on the inflamed organ. When a foul and loaded state of the tongue, bad taste in the mouth, and nausea indicate disordered stomach, an ordinary emetic may be advantageously used after the abstraction of blood. If this condition of the stomach, with costiveness, should be the only obvious cause of the inflammation, and the latter not very violent, the emetic followed by an active purgative, may be employed without bleeding. Ipecacuanha and tartrite of antimony may be given in the usual combination; or the liquor an-

timonii tartarizati may be administered, a table spoonful every half hour until the requisite effect is produced. The latter remedy generally purges as well as vomits. After bleeding and purging, antimonials may be given in nauseating doses, such as a quarter of a grain of tartarised antimony in the saline mixture, with advantageous effect in diminishing inflammatory disturbance.

The measures which I have now pointed out, namely, abstraction of blood, local and general, purging, vomiting, blistering, diaphoretics, aided by low diet, and the protection of the organ from injurious external influences, are those on which you may confidently rely for subduing ophthalmic inflammation. They must be continued and repeated, according to the exigence of the case, until the inflammation is decidedly subdued, and a return to the natural state of the part is clearly visible. They embrace all that is of real importance. You will suppose the subject of local applications has escaped my memory; indeed I place very little reliance on them. Patients, however, have greater faith; they wish for something to be done to the part; they want fomentations, washes, or other local means; and while they persuade themselves that they derive benefit from such applications, they induce even medical men to place a kind of confidence in them, for which there is probably no good reason. Heat and pain may be lessened; some temporary ease may be procured, and at all events the feelings of the patient must be regarded. Then, should we use cold or warm applications, and in what cases ought one or the other to be employed? The latter has been long a sort of vexata quæstio in therapeutics. I recollect when nothing but cold applications were used in inflammation; now, I believe, warm are rather more in vogue. An elderly gentleman, who had tried various cold applications formerly in fashion, for some inflammatory complaint, without being much relieved by them, consulted Mr. Hunter. "Why," said Mr. Hunter, "you seem to have tried all the cold applications, you had better now try warm ones." I believe you may adopt Mr. Hunter's mode of proceeding; try cold and warm applications, and change them according to the feelings of the patient. Cold applications certainly diminish the heat of the part, and lessen the burning sensation which the patient feels under acute inflammation, but often, after they have been used for some time, they cause a chilling and aching feel. In that case, let the wash originally used be warmed before it is applied. Of the cold applications, the saturnine wash, made with rose water, or vinegar and water, may be used. Cold water simply, I suppose, is capable of doing all the good that can be effected by them. I am not aware that the superacetate of lead adds any thing to its efficacy. The use of rose water is an agreeable mode of accomplishing the purpose. Washes of opium have been recommended under the idea of their having local influence, as sedatives; but there is no proof of their possessing such a virtue. Warmth may be applied by means of decoctions of poppy or chamomile flowers, by simple warm water, or the steam of boiling water.

These local applications, if they do not do much good, at least satisfy the mind of the patient; but your reliance will be placed upon the antiphlogistic treatment, which I have already pointed out. If that treatment be instituted early, and followed up vigorously, it will cut short ophthalmic inflammation in 49 cases out of 50; and if it does not fully accomplish this, it will so moderate the inflammatory excitement as to remove all risk of any alteration of structure capable of injuring sight. I speak with the greatest confidence, from long and uniform experience, of the decided advantage of employing the antiphlogistic treatment to its fullest extent in the treatment of ophthalmic inflammation. You may fancy that the loss of so much blood may debilitate the patient, and that this active treatment is not necessary for an inflammation of the eye; but when the case requires depletion, it is much better, not only on account of the local affection, but even with reference to the general health of the patient, to cut short the disorder at once by active treatment, than to allow it to go lingering on for three or four weeks, by resorting to less vigorous measures. There is no comparison between the two modes of treatment, even as it respects the general health, independently of the advantage which active measures possess of quickly restoring the functions of the eye. The great error has consisted in treating ophthalmic inflamation too much as a local affection, and relying accordingly on inefficacious local means. In a severe case, after taking blood from the arm, if the disposition to inflammatory congestion in the vessels of the organ should continue, you will find it advantageous to cup from the temple, or apply a considerable number of leeches round the eye. After bleeding the patient freely and evacuating the bowels in the morning, and applying leeches, or cupping if necessary, in the

evening, you will generally find the patient greatly relieved on the following day. It will seldom be necessary to repeat the bleeding from the arm, but this does occasionally happen, and the repetition of cupping or leeches is often required.

Inflammation of the eye is not always characterised by the same violent symptoms, nor does it always require the very active treatment which I have just described. You will often see cases in which there is preternatural redness, without much pain, as long as the eye is at rest. Active exertion of it, or exposure to strong light, will occasion painful sensations, and produce copious lachrymal discharge. The organ may continue long in this state, and when it has existed for sometime the affection has been distinguished by the name of chronic ophthalmia. Inflammation is not one uniform process; the appearances which characterise it are not the same from the beginning to the end. An inflammatory attack presents a successive series of phenomena, differing from each other according to the stage in which they take place; it commences insensibly, increases gradually, and after proceeding to its full development, it then exhibits a period of gradual decline, and the part slowly recovers its healthy state. Chronic inflammation is the stage of decline and recovery, particularly when the latter is protracted, and not a kind of inflammation different in itself. If the acute stage be inertly treated, if the patient have conducted himself imprudently by persisting to use the organ, or by not submitting to the necessary restrictions in point of diet, or if after the inflammation has been in a great measure subdued, he should have begun to use the organ too soon, or indulged in drinking or other imprudences, the chronic stage of inflammation may be prolonged indefinitely, the vessels continue preternaturally distended, the organ is in an irritable state, and easily excited into more active and painful disease. In individuals of weak and unhealthy constitution, the acute stage of inflammation is short, the violent symptoms soon disappear, and the chronic stage of inflammation comes on and lasts for a considerable time. In old persons of unsound habit there is sometimes hardly any well-marked acute stage, but the inflammation seems to be of a languid chronic character from the beginning. Scarpa represents the matter as if there is necessarily an acute and a chronic stage in all ophthalmiæ; he considers these as opposite in their nature and causes, and he prescribes opposite modes of treatment, namely, the antiphlogistic plan for the acute, and tonics, combined with local astringents, and stimulants for the chronic. With this view he regards it as a matter of great importance to mark the precise period at which the acute inflammation ends and the chronic commences. I consider this view of the subject altogether erroneous, both in principle and practice. The shorter the period of violent inflammatory congestion in any part, the sooner will the vessels recover, and if by active treatment you put a stop to the disturbance, the part will recover without going into any chronic stage at all. But if the means adopted in the beginning have not been sufficiently decisive, or if, from other causes, chronic inflammation has supervened, the question arises, how are we to treat it? Are we, with Scarpa, to adopt the tonic plan, accompanied with local applications of an astringent or stimulating kind? Certainly not. We must look at the symptoms of the particular case and regulate our treatment by them, not by the length of time the complaint may have continued.

General bleeding may be necessary after the lapse of many days, or even some weeks; and no length of time precludes the necessity of taking blood in some cases, by cupping from the temple or back of the neck, and by the application of leeches. The antiphlogistic treatment need not be so active in chronic cases; but it should still be continued in a mitigated form. The application of blisters, keeping up the discharge by the savine ointment may be useful; the state of the stomach and bowels should be attended to, and we may find it necessary to accompany the use of purgatives with moderate doses of mercurial medicines. The purgatives need not be so active as those employed in the acute stage; the purpose will be answered by rhubarb, magnesia, sulphate of potash, epsom salts, extract of colocynth or aloes combined with blue pill and given in small doses.

Permanent counter-irritation by issue or seton in the temple, though an unpleasant, is a very efficient remedy in obstinate chronic ophthalmia. No other plan will so decidedly arrest beginning chronic inflammation, and at the same time put a stop to incipient changes of structure, as this artificial dischage in the neighbourhood of the eye, combined with the use of mercurial and aperient medicines, the former either in alterative or larger doses. If we combine with the

steady prosecution of such a course, attention to diet, residence in a pure air, and the occasional use of leeches when there may be evidence of more active mischief, we shall be able to arrest the inflammation at least, if we should not succeed in removing all its effects. [Mr. Lawrence described the mode of making and managing the issue and seton in the temple.]

It still remains to be considered whether any benefit is to be derived from the employment of local astringent, and stimulating applications.

REVIEW FROM THE WEST.

An Introduction to the Use of the Stethoscope, with its application to the Diagnosis in Diseases of the Thoracic Viscera, including the Pathology of these various affections. By WILLIAM STOKES, M. D. Maclachlan & Co., Edinburgh; Baldwin & Co., London; and Hodges & Co., Dublin. 8vo. 1825. pp. 224.

Ham.—Will you play upon this pipe?
Guil.—My lord, I cannot.
Shakspeare.

EIGHT years is a long time for any instrument, in this fertile age of invention, to keep its place unsupplanted by an improvement, or a substitute; the stethoscope has triumphantly withstood this fury of modern innovation. It came into the world, from the hands of Laennec, like Minerva from the hands of Jupiter, perfect in all its parts. Patenteed in its very birth, it still retains the simplicity of its original form, unmutilated by the efforts of refinement. Of all the discoveries of the present day it has, perhaps, experienced the greatest share of popular indulgence, and is most indebted to the attention of individual talent.—Every member of the Profession, from the pupil to the professor, speaks of it; some, and those too of the first rate abilities, have made it their particular study to illustrate its uses. So far it has been peculiarly fortunate, and it must not be for want of notoriety, or cultivation, that its merits will remain unknown. Introduced into notice with the irresistible sanction of genius impressed upon it, and supported by the testimony of competent judges, its fame spurned the tardiness of progressive advancement; its utility could not long continue problematical—the one was instantaneous, the other undoubted. It was but natural, indeed, that an instrument which had for its object not only the detection, but also the discrimination of one from another of a series of the most obscure diseases, should have excited a degree of interest proportionate to the difficulties which were immediately to be removed. It promised to have opened a sort of short cut, or royal road, to a species of knowledge coveted by all, but of avowedly hard attainment. Through its agency, the morbid mysteries of nature, which had hitherto baffled human experience, were now to be unveiled to the crude perceptions of the merest tyro in the profession of medicine. A new sense was thus added, or rather an old one, but little used heretofore, was made available to the diagnostic art. The antiquated system of question and answer, and all that paraphrastic prolixity of the ancient process of examination, by which our goodly ancestors groped out the seat and nature of thoracic complaints, were to be exchanged for the more certain and compendious divination of the stethoscope. A physician had only to put his hand in his pocket, apply this mahogany oracle to his ear, and, *presto*, all was to have been as plain to his understanding as if he had actually made a dissection of the parts themselves. How little did the venerable dispensers of health, who flourished "sixty years since," know to